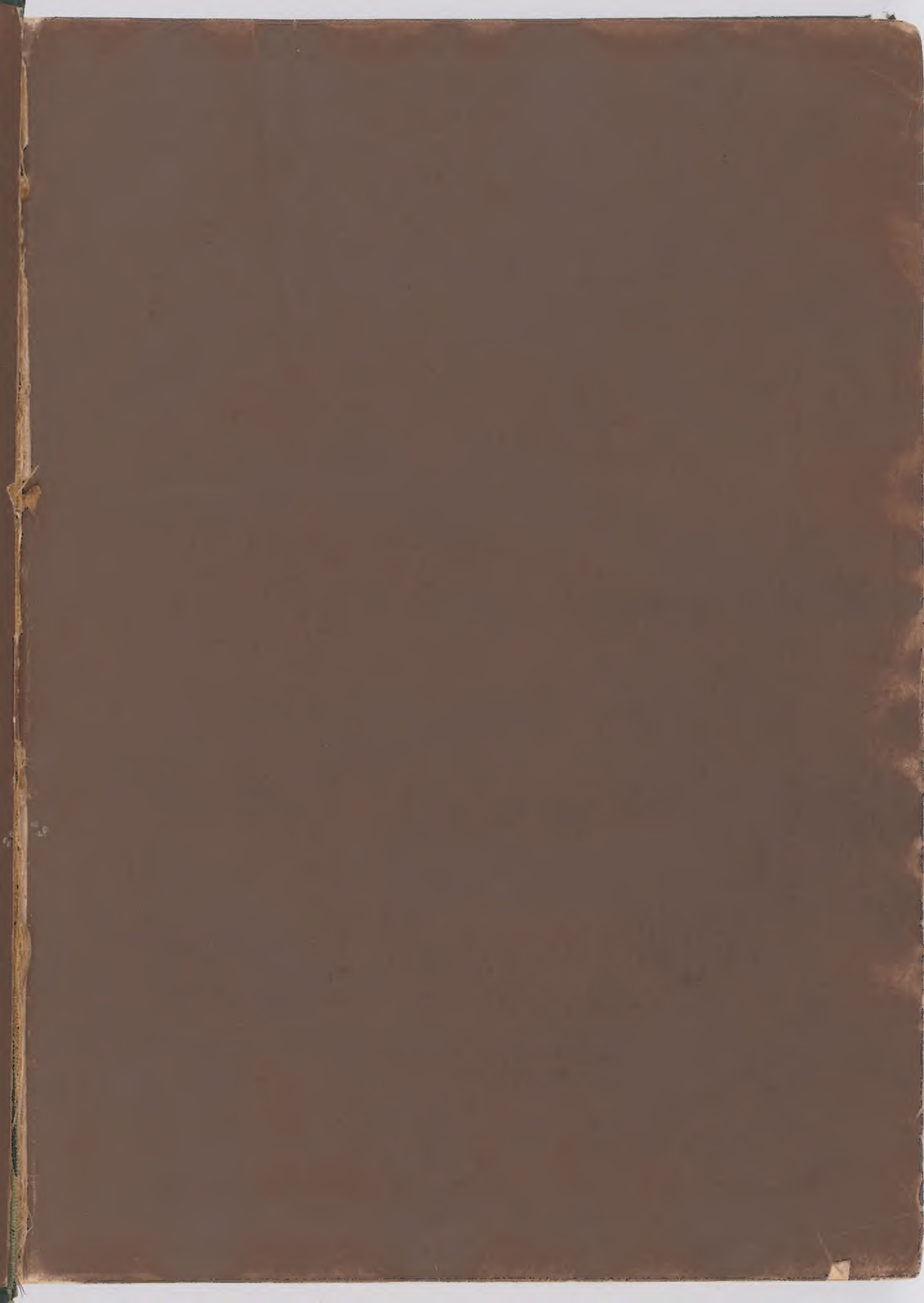


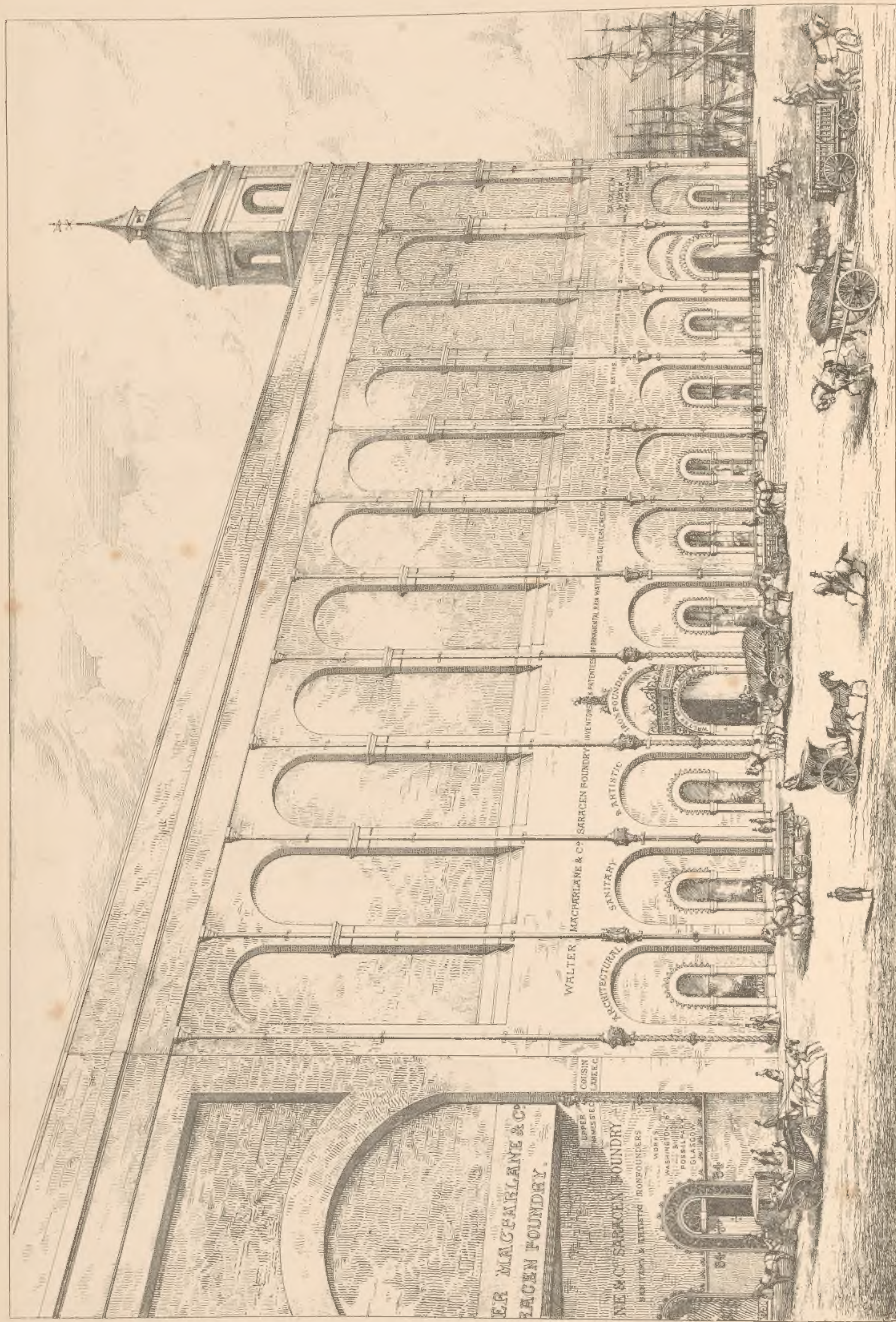
MACFARLANE'S
CASTINGS.



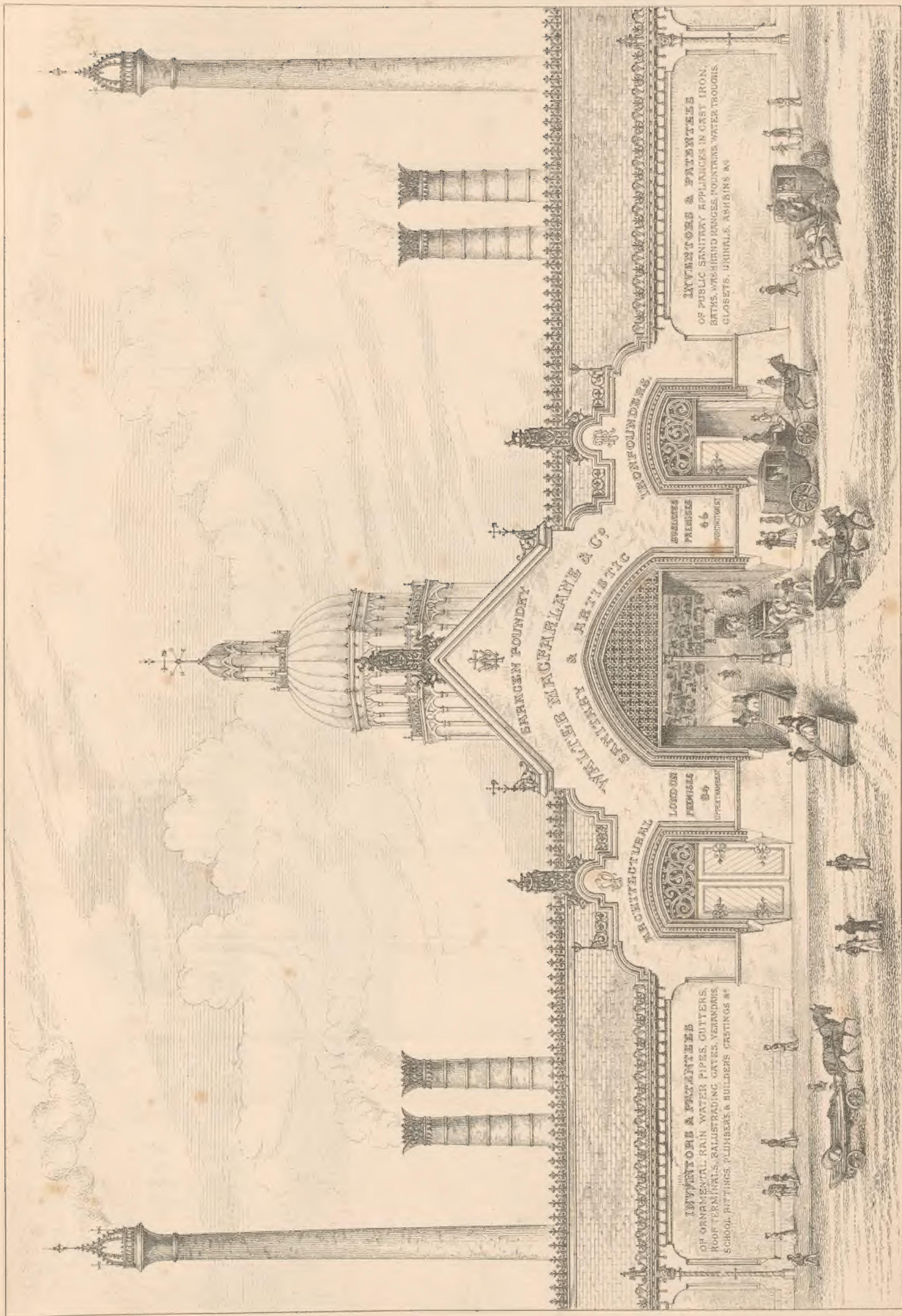
inscribed to R. Caverer.

= Raffaele Caverer: - contributed to original
Treasury Department in Rome.
Museo Geologico
walking the banks of the Tiber
etc.

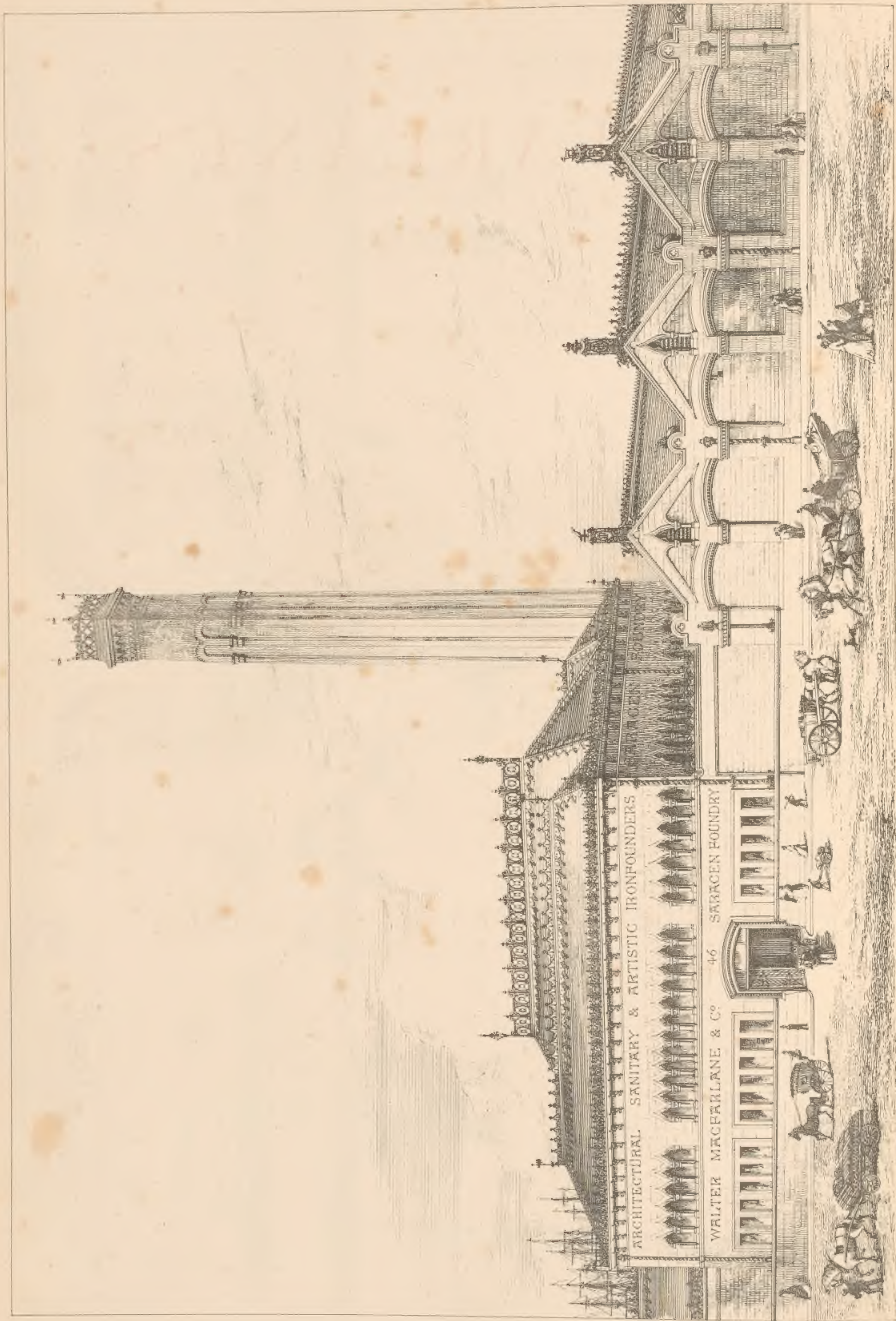
[2072]



ELEVATION OF LONDON PREMISES.



ELEVATION OF NEW WORKS, POSSILPARK.



ELEVATION OF WASHINGTON ST. PREMISES, GLASGOW.

CATALOGUE OF
MACFARLANE'S
CASTINGS.

FIFTH EDITION.

AWARDED INTERNATIONAL PRIZE MEDAL, 1862.



Contractors by Special Appointment to her Majesty's War Department.



WALTER MACFARLANE & CO.,
ARCHITECTURAL, SANITARY, AND ARTISTIC IRONFOUNDERS,
SARACEN FOUNDRY,
WASHINGTON STREET, GLASGOW,
[NEW WORKS,—POSSILPARK.]
AND
84 UPPER THAMES STREET, LONDON, E.C.

PRESENTED TO

Sig. Ingr. R. Canerari
Florence Italy

With the Compliments of MESSRS. WALTER MACFARLANE & CO.

PREFACE TO THE FIFTH EDITION.

THE legitimate development and application of Iron Work, have been carefully studied and followed as a profession by our Mr. Macfarlane for nearly the last forty years, the earlier portion of that time having been devoted to "Hammered Iron Work," and the latter to "Cast Iron Work." It is to be regretted that so valuable a material as Cast Iron, should occupy the subordinate position it has hitherto done, almost invariably appearing under the borrowed form of some other material, as stone, wood, bronze, &c. That it has a high destiny to fulfil, and is capable of occupying an honest and an honourable position, we think the following pages bear ample testimony. Metals, like men, arrive at perfection through successive stages of refinement, and we must not lose sight of the fact that Cast Iron applied to the decorative arts, is only in its infancy, dating no farther back than two or three hundred years, during which time little intelligence has been evinced in realizing its power and truthful expression.

There is perhaps no branch of the art industry of this country which has made such rapid progress as the one we here illustrate, and as its pioneers we feel a laudable pride in seeing our labours so liberally appreciated by the general public. When we entered upon the course of action now consistently pursued for the last twenty years, the public had comparatively nothing to choose from in this class of goods, beyond a few flat, tame, common-place articles, having no pretensions whatever to artistic feeling. The range of objects now produced is boundless, whilst the sharp fresh iron-like features impressed on each of our castings impart to them that individuality so characteristic of our productions. We have not confined ourselves to any particular style of architecture, but have rather aimed at producing such a variety of designs in each style as to meet most requirements.

Our various Sanitary Appliances are now prominent features, not only in the arrangements of public Institutions, but also in the street Architecture of Towns, and it is gratifying to know that our views on this important question are endorsed by the most advanced minds of the age.

The innumerable purposes to which our Castings may be applied, whether in combination with themselves, or in connection with other materials or structures, are partially illustrated by our numerous pages of "examples," but there will be no difficulty in forming other combinations to suit the special requirements of any case, the details as to size, proportion, &c., being so accurately delineated in each design.

We make our grateful acknowledgments to the many kind professional friends who have assisted us in our various undertakings; and to our customers and the public generally, who have so warmly appreciated our efforts. With the view of simplifying the ordering of our goods, please describe each article by the words used in this book, always *specifying in the Schedule*, the maker's name, MACFARLANE. We find it necessary to state that every casting we make has our Trade Mark legibly impressed upon it,—thus



WALTER MACFARLANE & CO.

CONTENTS.

PREFACE.

ELEVATION of LONDON PREMISES.

"	NEW WORKS—POSSILPARK.
"	GLASGOW PREMISES.

SECTION I.—PIPES.

Directions for Ordering,	PAGE
No. 1 Pipes (round) and Connections,	6
No. 2 " (square), "	7
No. 3 " (semicircular), "	8
No. 9 " (heavy), "	9
No. 19 " (hexagon), "	9
Ornamental Pipes,	10-11
" Heads,	12-16
" F r s,	17 18
" Pipe Connections,	19

SECTION II.—GUTTERS.

Directions for Ordering,	20
Half-round Gutters and Connections,	21-22
O. G., "	23
Ornamental Gutters,	24 74
" Figured Gutters,	75 96
Circular Gutters,	97
Boundary Wall Gutters,	98 105
Centre Gutters,	106-114
Ornamental Gutter Connections,	115
Gutter Grates,	116
" Ornaments,	117-121
" Brackets,	122

SECTION III.—ROOF PLATES.

Directions for Ordering,	123
Ridge and Valley Plate Diagrams,	124
Ridge Plates and Connections,	125-126
Valley, Skew, Flashing, and Step Plates,	127
Curb Plates,	128
Hip Plates,	129

SECTION IV.—TERMINALS.

Terminals, Finials, Crosses, Bannerets, }	
Weather-vanes, Flag staffs, &c., }	130-237

SECTION V.—RAILING.

Railing, Cresting and Balconies; Frieze, Altar, }	
Screen, Gallery-front, and Tomb Rails; Grilles, }	238 360 1/2
Window-guards, Drip-friezes, &c., }	
Balusters and Stair-railing,	361-387
Spiral Stairs,	384 1/2
Railing Standards,	388-397
Road Posts,	398
Guard "	398
Railing Connections,	399
Handrails,	400
Gates,	401-421
Hinges,	422-423

SECTION VI.—PANELS.

Panels,	PAGE
Ventilators,	429-459
Gratings and Floor Plates,	459
	460-464

SECTION VII.—COLUMNS, &c.

Columns,	465-510
Pilasters,	511-513
Brackets and Spandrels,	514 527
Trusses,	528

SECTION VIII.—SIGN LETTERS.

Sign Letters, Numerals, and Tablets,	529-530
--------------------------------------	---------

SECTION IX.—DESK, &c., STANDARDS.

Desk Standards,	531
Desk and Bench Standards,	531-532
Bench Standards,	533-535
Table "	536
Chair "	534
Settee "	535
Pew-end "	536
Stepboard "	535
Ink Wells,	532

SECTION X.—LAMPS.

Lamp Pillars, Standards, and Brackets,	539-553
--	---------

SECTION XI. DRINKING FOUNTAINS

Drinking Fountains,	554 555
---------------------	---------

SECTION XII.—ABLUTIONARY APPLIANCES

Wash Hand Basins,	556-557
Wash Foot "	557
Baths,	558-559
Water Troughs,	560

SANITARY ARRANGEMENTS,	561-564
------------------------	---------

SECTION XIII.—URINALS.

Urinals,	565 569
----------	---------

SECTION XIV.—WATER-CLOSETS.

Water-Closets,	571-578
----------------	---------

SECTION XV.—ORDURE CLOSETS.

Ordure Closets,	579 590
-----------------	---------

SECTION XVI.—ASH BINS.

Ash B ns,	591
-----------	-----

SECTION XVII.—PLUMBERS' CASTINGS.

Plumbers' Castings,	593-595
---------------------	---------

EXAMPLES OF APPLICATION.

No. 64 Gutter Cornice, &c.,	122 1/4
No. 76 Gutters, Roof Plates, &c.,	122 1/2
No. 59 Terminals, &c.,	232
No. 89 "	224
No. 96 "	223
No. 145 "	228
No. 168 "	218
No. 208 "	227
No. 219 "	221
No. 241 "	225
No. 242 "	219
No. 243 "	229
No. 249 "	231
No. 255 "	230
No. 256 "	226
No. 257 "	227
No. 259 "	220

No. 640 Stair Railing,	425
No. 641 "	424
No. 642 "	427
No. 643 "	426
No. 670 "	428
No. 674 "	428

No. 3 Desk and Bench,	536
No. 5 Bench and Bookboard,	538
No. 10 Single Desk and Bench,	537
No. 15 Desk and Bench,	536
No. 17 Folding Desk and Bench,	537
No. 19 Bench and Table,	538
No. 23 Drawing Desk and Bench,	537
No. 38 Desk, Table, Bench, Back Rail, and Footboard,	538

Arrangements of Closets and Ash Bins,	592
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PRICE LIST, WITH INDEX TO ILLUSTRATIONS, AT END.

SECTION I.—PIPES.

FOR RAIN-WATER, STOVE, SOIL, AND VENTILATING PURPOSES.

The continuous exertions made by us to improve the solidity and strength of Cast Iron Pipes, have met with complete success; our inventions in Pipe Moulding not only enable us to improve the quality, but also to produce such a variety of patterns as will enable the Architect to select a design that will harmonize with the style of the building to which it may be applied. In a climate such as ours, where the rainfall is great, and where Water Closets, Sinks, Baths, and Lavatories, are in almost every house, it becomes an important question as to how the waste water from these can best be carried off. Rain Water Pipes have hitherto been placed in out-of-the-way corners, or hidden in the interior of the building, as if they were unfit to be seen. This no doubt arose from the low state of art they generally displayed, and we shall endeavour to show that, when properly treated, they have the elements within themselves of improving, rather than detracting from the amenity of a building.

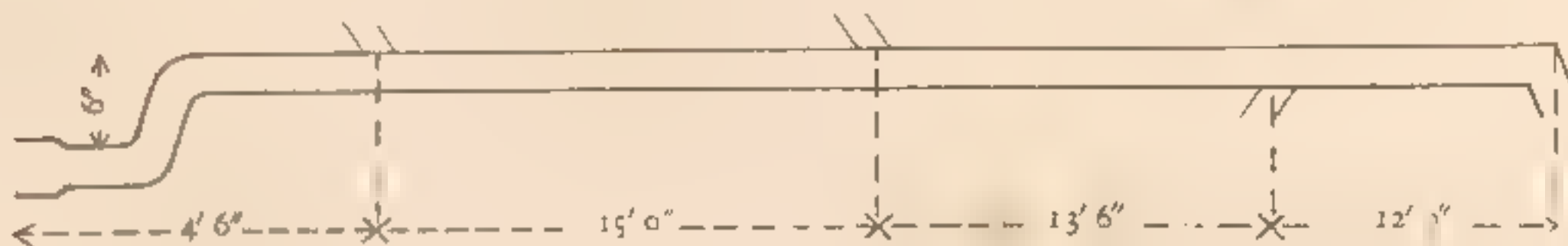
Each stalk of Pipes should in all cases be connected with the underground drains, thus ventilating the sewers, by carrying their heated vapours over the house tops.

DIRECTIONS FOR GIVING ORDERS.

In ordering Pipes our customers may either order so many lengths, along with the necessary quantity of Heads, Ears, Offsets, Pedestals, &c., and cut them to the required lengths themselves, or by giving us a rough sketch, showing the exact position of the various connections in each stalk, we will furnish them accordingly, all properly marked, and ready for fitting up.

The following examples show the simplest method of ordering, and giving measurements for Pipes, when they are wanted cut to particular lengths.

1 Stalk of No. 1 Pipes 4", with No. 2 Ears, Offset, Branch Pieces, and Shoe, as sketch.



1 Stalk of No. 4 Pipes, 5" x 3 1/2", with No. 8 Head, No. 20 Ears, and No. 4 Offset, as sketch.



1 Stalk of Pipes, the 41' 0" length to consist of No. 5 Pipe, 5 x 3 1/2", with No. 19 Head, No. 19 Ears, and No. 5 Elbow,—and the 16' 6" length to be 4" No. 1 Pipes and Elbow, as sketch.

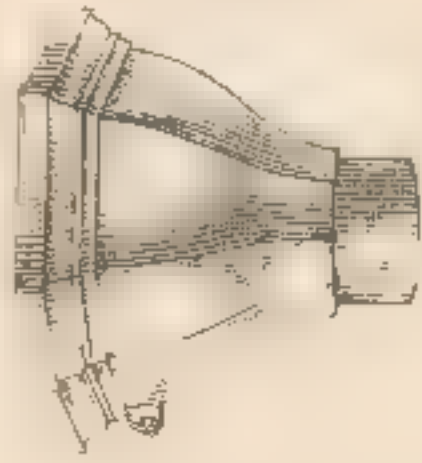


MACFARLANE'S PATENT NO. RAIN WATER, STOVE OR SOIL PIPES AND CONNECTIONS

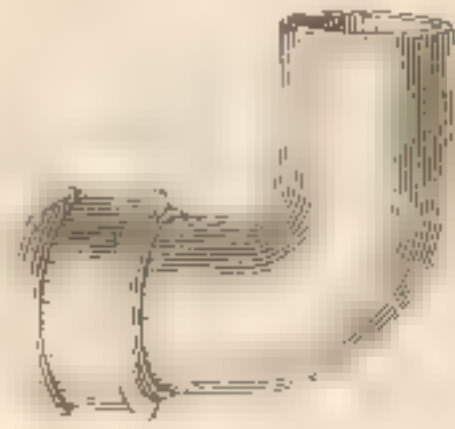
PIPES IN 2, 3, 4 AND 6 FEET LENGTHS, WITH OR WITHOUT EARS

Besides the Elbows and Offsets shown here, we can make them any angle or length, and the Offsets to suit any projection of cornice or plinth *to order*.

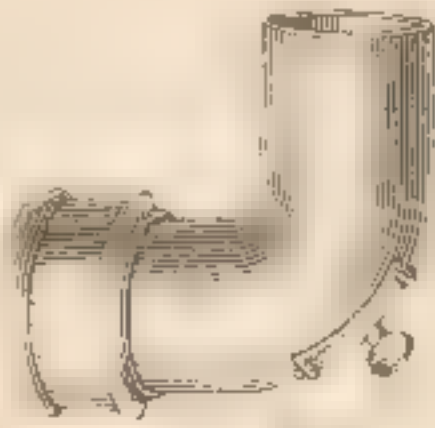
NO. HEAD, FLAT & CORNER



ELBOW



ELBOW
WITH CLEANING DOOR



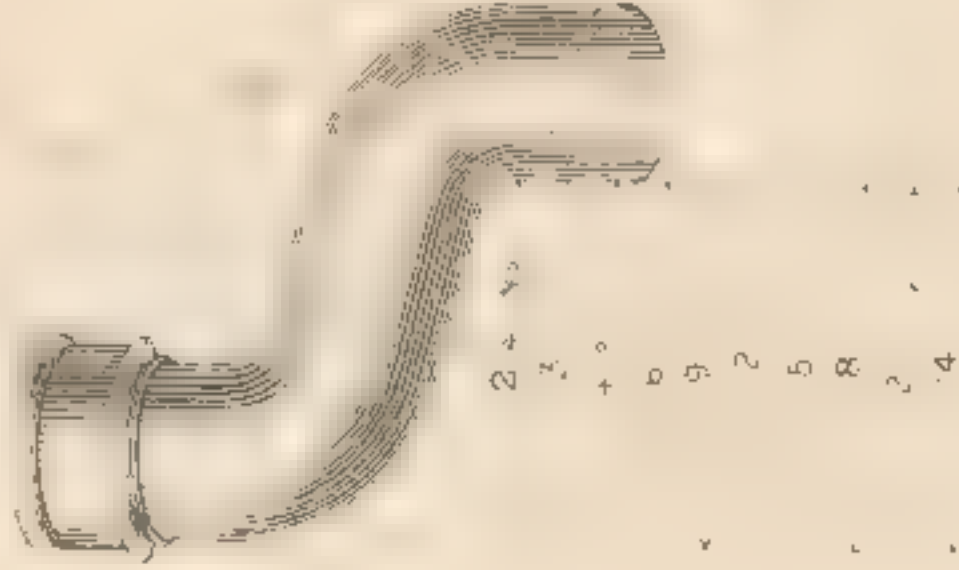
OBTUSE ELBOW



OBTUSE ELBOW
WITH CLEANING DOOR



OFFSET



BRANCH PIECE



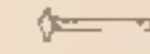
SYMPHON TRAP



SYMPHON TRAP



NO. 1 SPIKE FOR LEAD



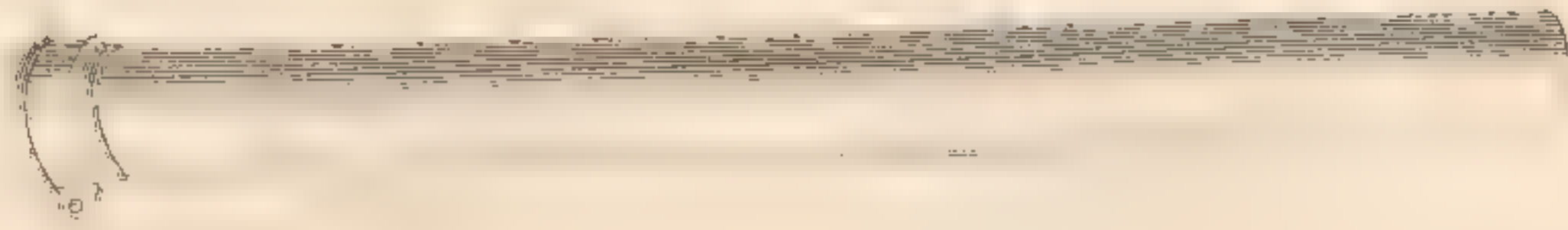
2 2 1/2 3 3 1/2 4 4 1/2 5 5 1/2 6 6 1/2 7 7 1/2 8 8 1/2 9 9 1/2 10 10 1/2 11 11 1/2 12 12 1/2 13 13 1/2 14 14 1/2 15 15 1/2 16 16 1/2 17 17 1/2 18 18 1/2 19 19 1/2 20 20 1/2 21 21 1/2 22 22 1/2 23 23 1/2 24 24 1/2 25 25 1/2 26 26 1/2 27 27 1/2 28 28 1/2 29 29 1/2 30 30 1/2 31 31 1/2 32 32 1/2 33 33 1/2 34 34 1/2 35 35 1/2 36 36 1/2 37 37 1/2 38 38 1/2 39 39 1/2 40 40 1/2 41 41 1/2 42 42 1/2 43 43 1/2 44 44 1/2 45 45 1/2 46 46 1/2 47 47 1/2 48 48 1/2 49 49 1/2 50 50 1/2 51 51 1/2 52 52 1/2 53 53 1/2 54 54 1/2 55 55 1/2 56 56 1/2 57 57 1/2 58 58 1/2 59 59 1/2 60 60 1/2 61 61 1/2 62 62 1/2 63 63 1/2 64 64 1/2 65 65 1/2 66 66 1/2 67 67 1/2 68 68 1/2 69 69 1/2 70 70 1/2 71 71 1/2 72 72 1/2 73 73 1/2 74 74 1/2 75 75 1/2 76 76 1/2 77 77 1/2 78 78 1/2 79 79 1/2 80 80 1/2 81 81 1/2 82 82 1/2 83 83 1/2 84 84 1/2 85 85 1/2 86 86 1/2 87 87 1/2 88 88 1/2 89 89 1/2 90 90 1/2 91 91 1/2 92 92 1/2 93 93 1/2 94 94 1/2 95 95 1/2 96 96 1/2 97 97 1/2 98 98 1/2 99 99 1/2 100

SCALE INCHES - 1 FOOT

PATENT NOS 2 AND 3 RAN WATER N 2 3, 4 AND 6 FEET LENGTHS, WITH OR WITHOUT . . .

No. 2 and 3 are

No. 3
 Besides the Elbows and Offsets shown here, we can make them any angle or length, and the Offsets to suit any projection of cornice or plinth to order.



FRONT OFFSET

JOSE ELBOW



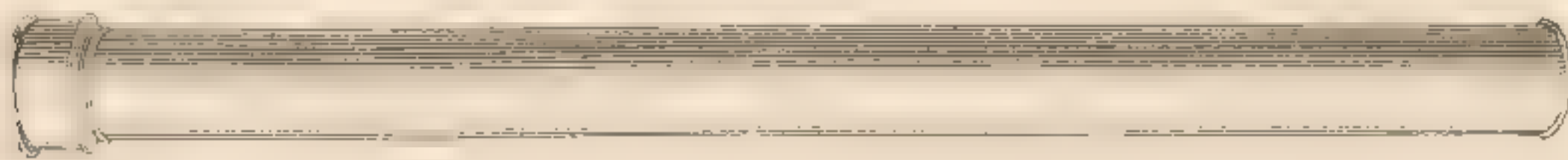
No. 2 Corner Offsets Elbows and Shoes are only made for equal-sided Pipes, viz. — $2\frac{1}{2} \times 2\frac{1}{2}$, 3×3 , $3\frac{1}{2} \times 3\frac{1}{2}$, 4×4 , $4\frac{1}{2} \times 4\frac{1}{2}$, 5×5 , and 6×6 ins.

No. 2— $2\frac{1}{2} \times 2$, $2\frac{1}{2} \times 2\frac{1}{2}$, 3×2 , $3 \times 2\frac{1}{2}$, 3×3 , $3\frac{1}{2} \times 2\frac{1}{2}$, $3\frac{1}{2} \times 3$, $3\frac{1}{2} \times 3\frac{1}{2}$, 4×2 , $4 \times 2\frac{1}{2}$, 4×3 , 4×4 , $4\frac{1}{2} \times 3$, $4\frac{1}{2} \times 4\frac{1}{2}$, 5×3 , $5 \times 3\frac{1}{2}$, 5×5 , 6×4 , and 6×6 ins.
 No. 3— $3 \times 2\frac{1}{2}$, 4×3 , $5 \times 3\frac{1}{2}$, and 6×4 ins.

MACFARLANE'S PATENT NOS 9 AND 19 PIPES AND CONNECTORS

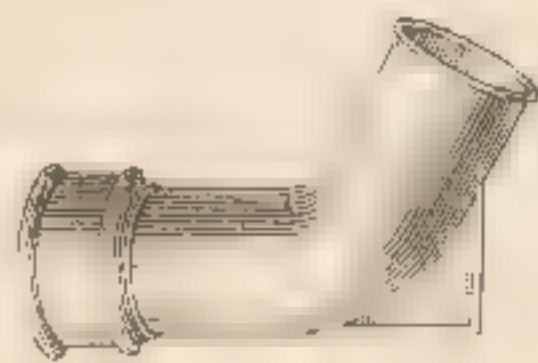
HEAVY RAIN WATER OR SOIL PIPES - These are made extra heavy, in order more thoroughly to suit better class buildings.

Nº 9 HEXAGON PRISON PIPES - These are specially adapted for, and largely used in, Prisons, Asylums, &c., the large size being placed from the ground floor to the top flat, and the small size from the eave gutter to the large pipe, the two being joined by means of the Diminishing Socket.

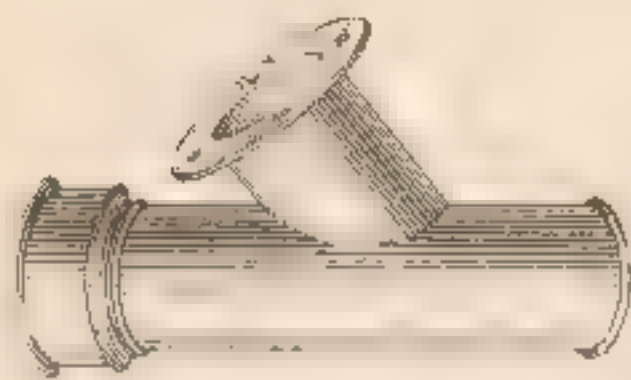


2 1/2, 3, 3 1/2, 4 AND 4 1/2 IN.
DIAMETER

ST. SE. ELBOW



BRANCH PIPE



SYPHON TRAP



LARGE TRAP

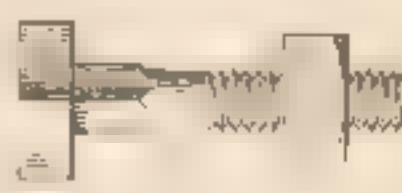


4 IN.
B
24

COSE FLANGE



BOLT & NUT



HALF FULL SIZE

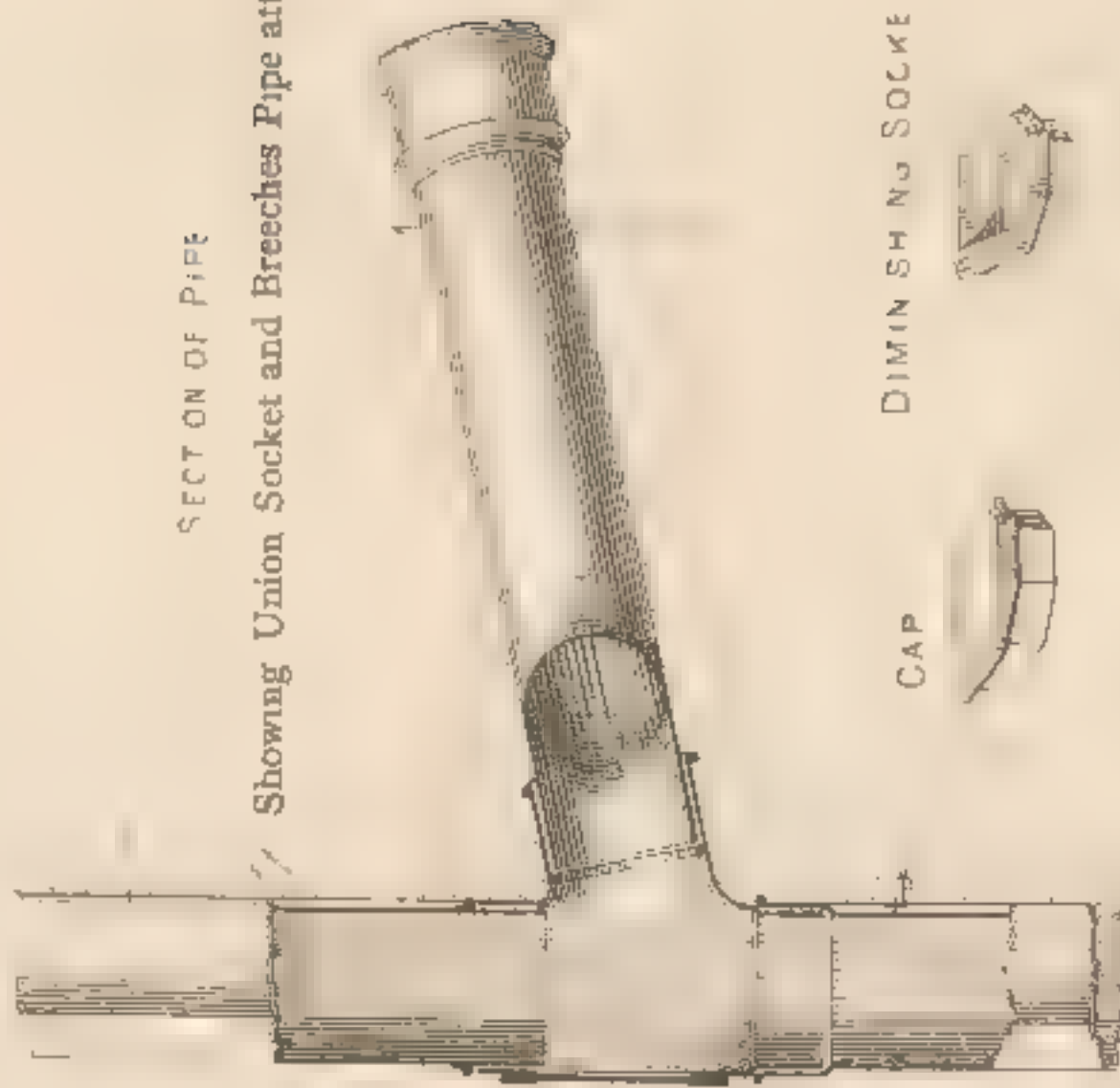
SHOE



SCALE 1 INCH = 1 FOOT

SECTION OF PIPE

Showing Union Socket and Breeches Pipe attached.



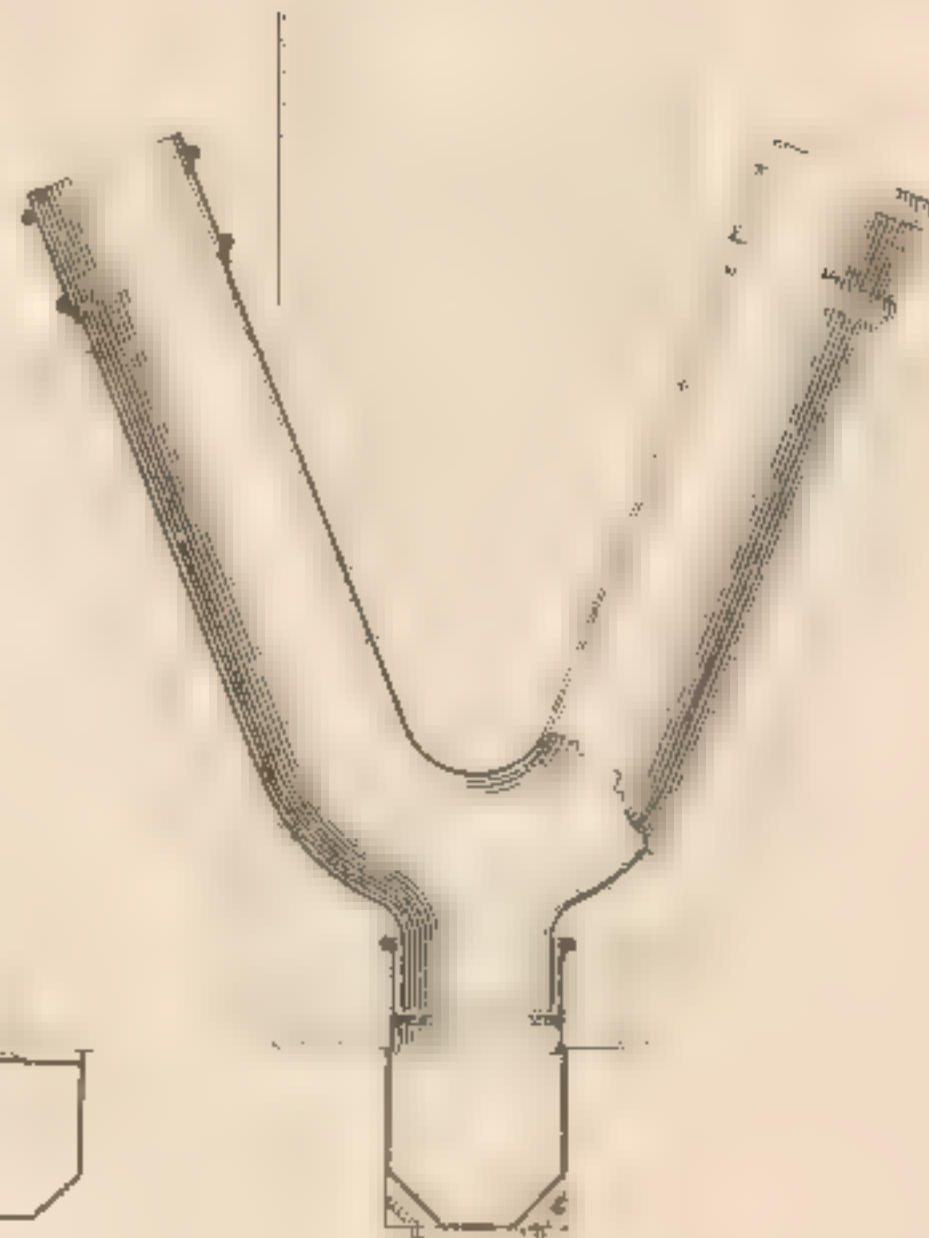
CAP



DIMINISHING SOCKET



PLAN OF BREECHES PIPE



Other lengths to order.

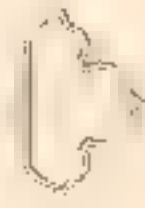
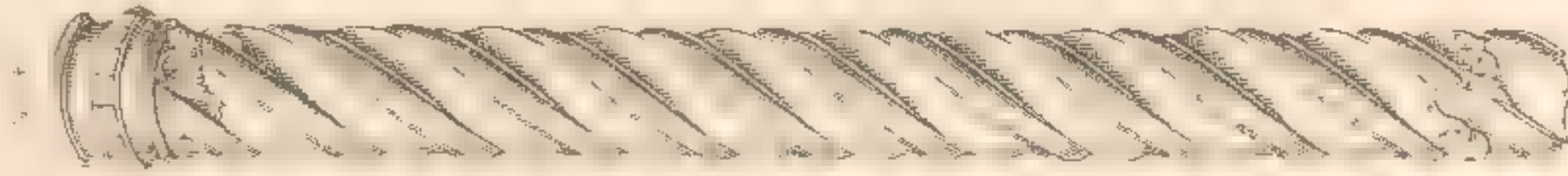
3 1/2 x 3/4 IN. 6 FT. LONG
5 x 5 IN. 10 FT. 8 IN. LONG

MACFARLANE'S PATENT ORNAMENTAL RAIN WATER PIPES IN 2, 3, 4 AND 6 FEET SIZES

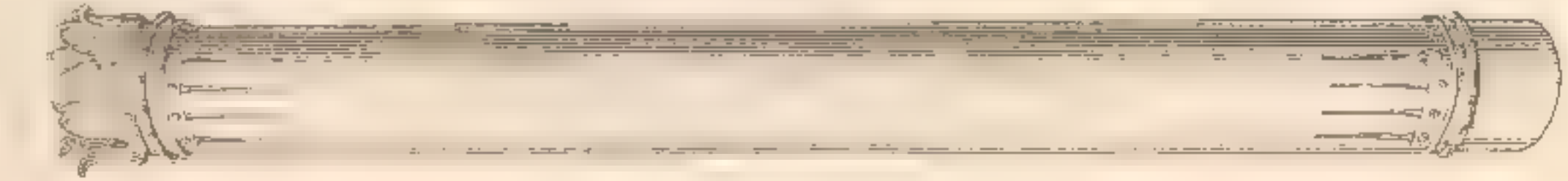
With the new omnifarious machinery of the present day, we have introduced such a variety of patterns as will harmonize with almost every style of architecture.



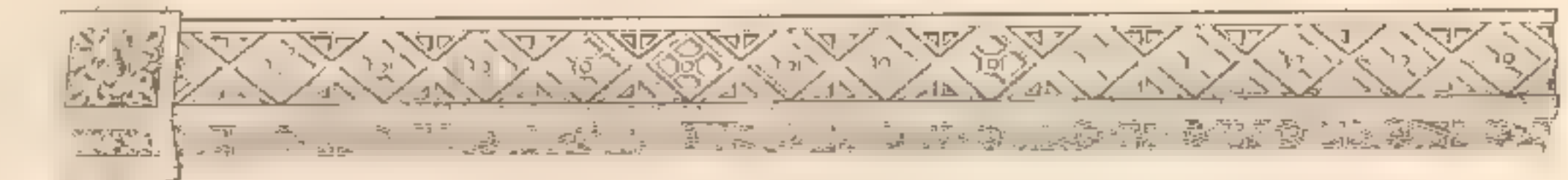
$\frac{d}{dt} \left(\frac{1}{r^2} \right) = -\frac{2}{r^3} \frac{dr}{dt}$


$$4x^7 - 3x^6 + 2x^5 - x^4 + 5x^3 - 2x^2 + 7x - 1$$


24. ϵ ϵ Δ^4 ϵ γ $N5$



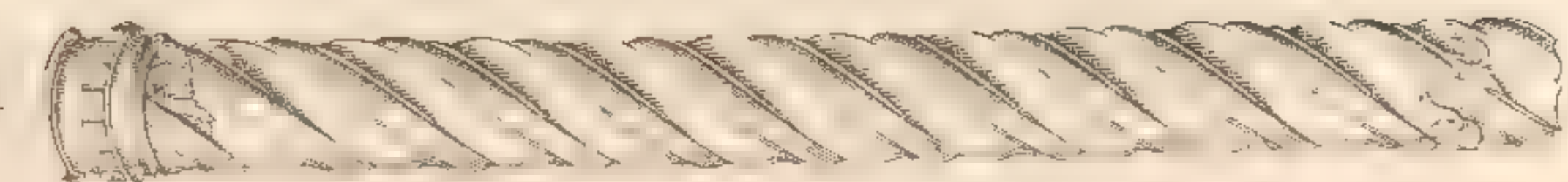
4 x 5 x 6 AND 8 x 4 INS



541



Cl. A. v. 1.2



34 AND 5 MS

4 FOOT

MA, FARLANE'S PATENT ORNAMENTAL RAIN WATER PIPES, IN 2, 3, 4 AND 6 FEET LENGTHS



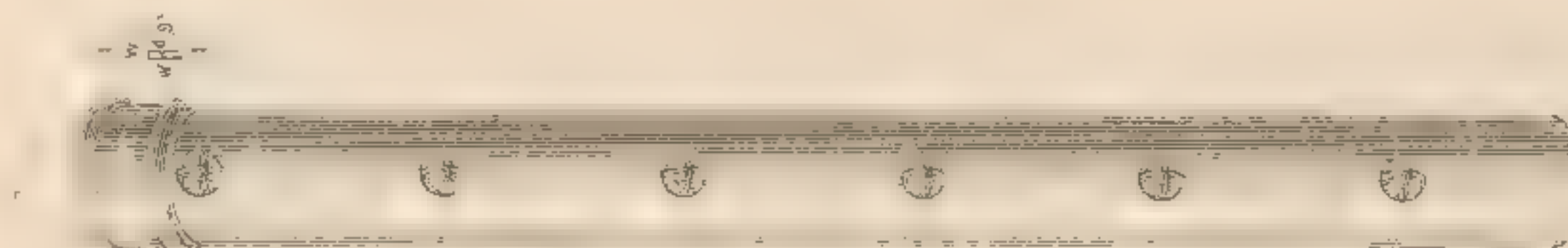
3, 4, 5 AND 6 INS



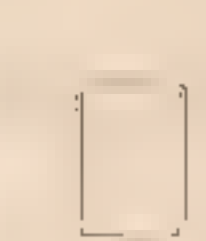
4, 5, 6 AND 8 INS



3, 4, 5 AND 6 INS



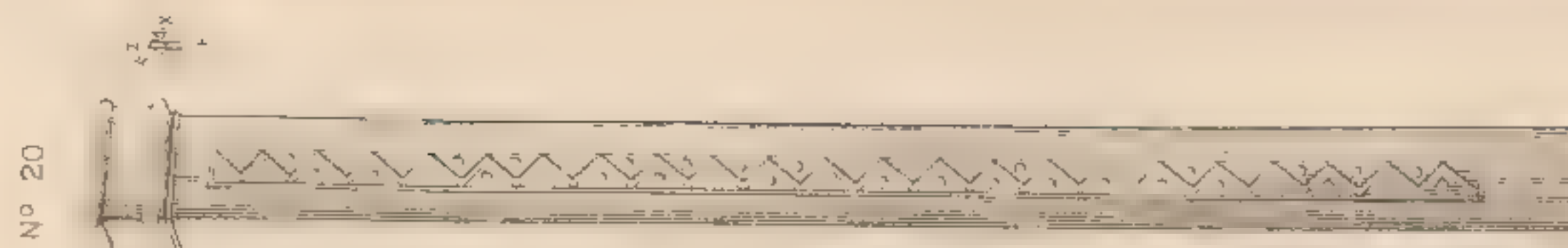
4, 5, 6 AND 8 INS



3, 4, 5 AND 6 INS



4, 5, 6 AND 8 INS



6 X 4 INS

SCALE INCH = FOOT

J. F. PATENT ORNAMENTAL RAIN WATER PIPE HEADS

These pipe heads, which these occupy on a building, gives considerable scope for variety of design, as illustrated by the numerous patterns shown on this page. The designs are of various styles, and are adapted to the various styles of architecture. The designs are of various styles, and are adapted to the various styles of architecture. The designs are of various styles, and are adapted to the various styles of architecture.



Fig. 1. Fig. 2.

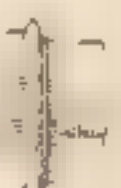
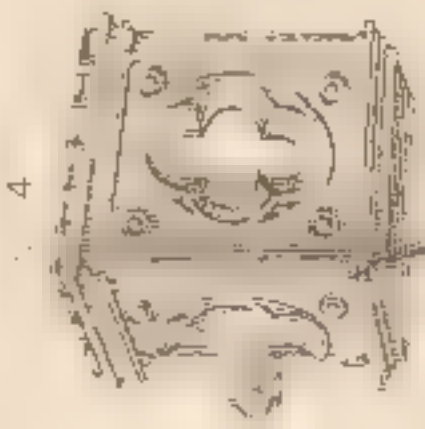


Fig. 3. Fig. 4.



Fig. 5. Fig. 6.

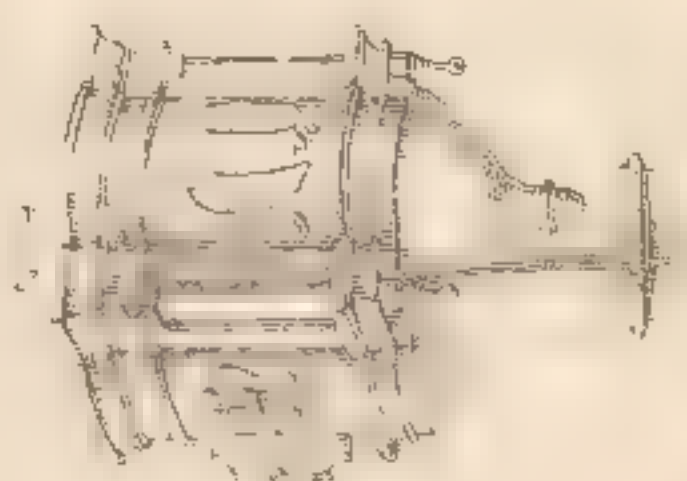


Fig. 7.

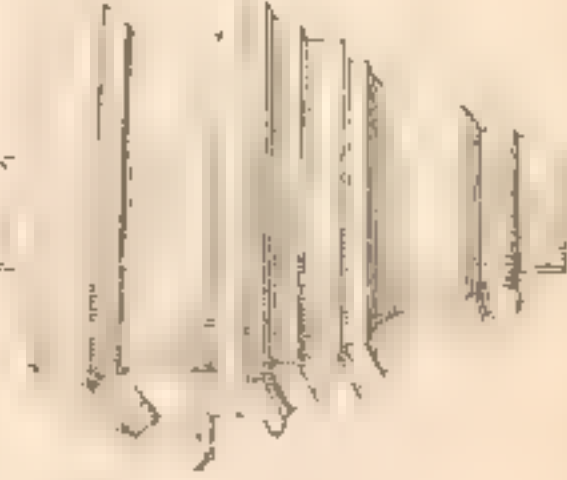


Fig. 8.



Fig. 9.

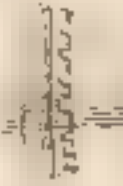


Fig. 10. Fig. 11.

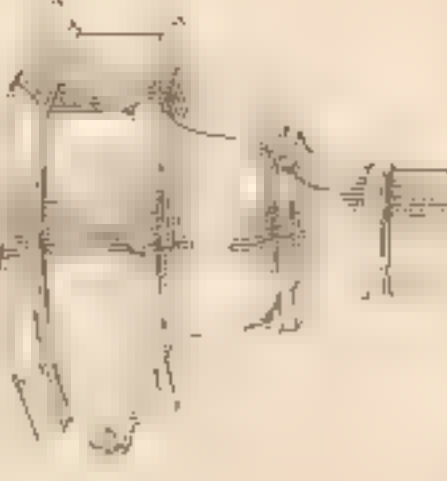


Fig. 12.

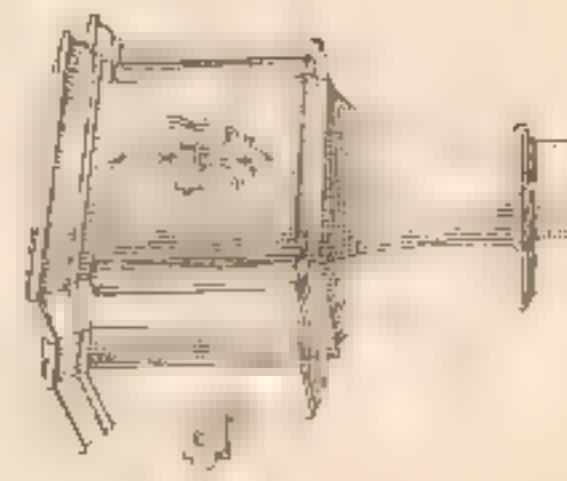


Fig. 13.



Fig. 14.

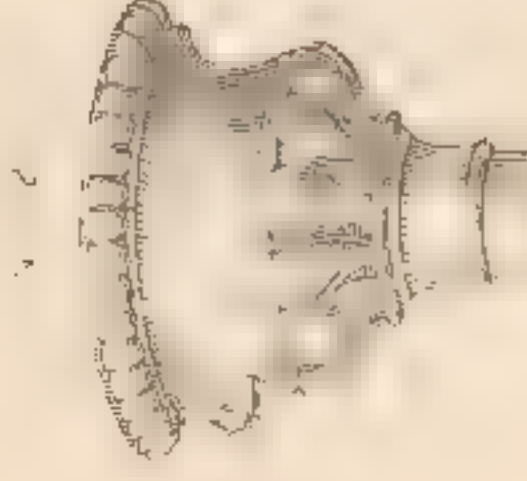


Fig. 15.



Fig. 16.

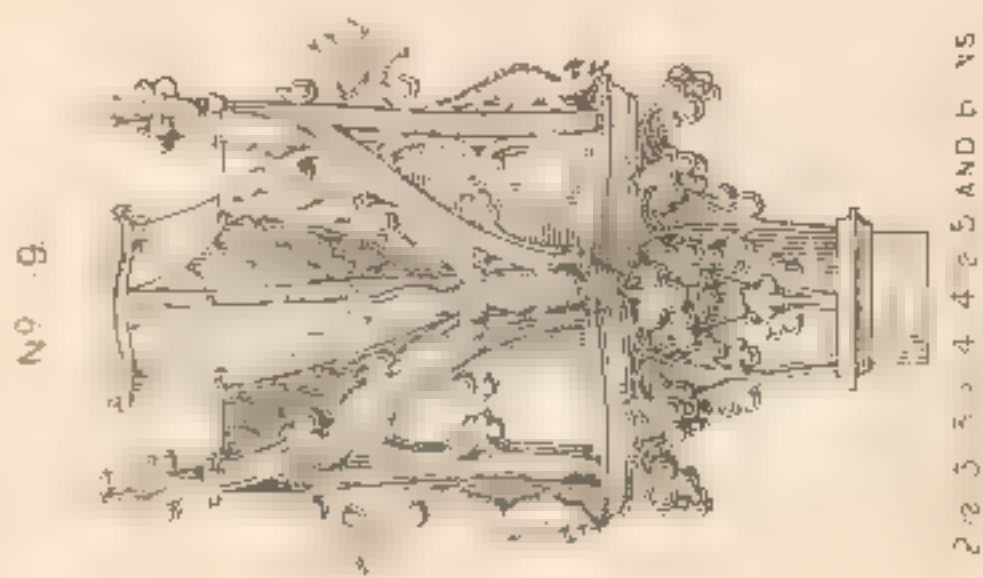


Fig. 17.

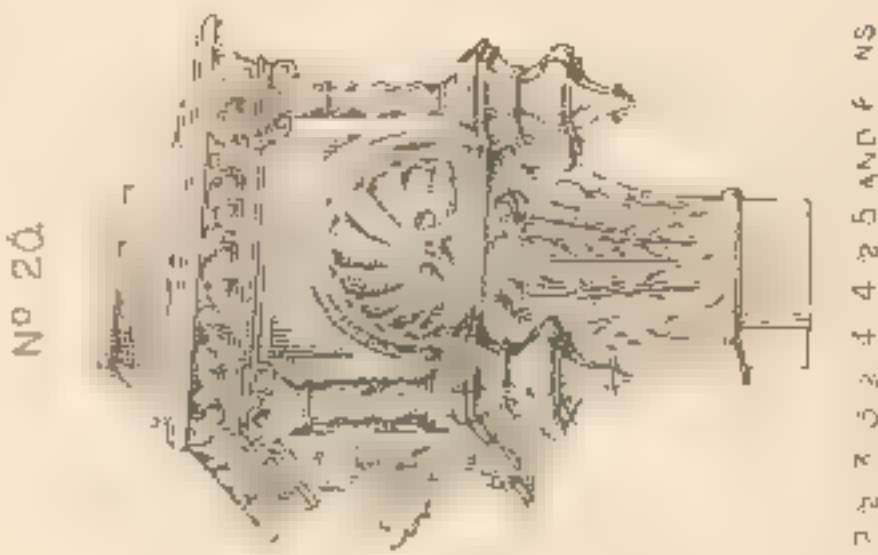
MACFARLANE'S PATENT ORNAMENTAL RAIN WATER PIPE HEADS



18 4 4 2.5 AND 6 INS



19 3 3 4 4 2.5 AND 6 INS



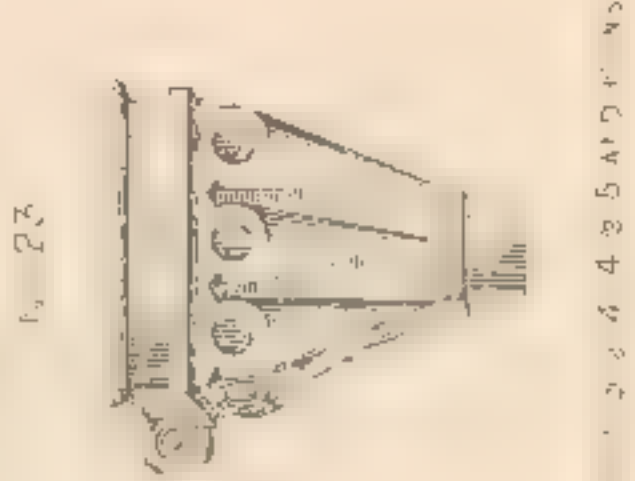
20 3 3 4 4 2.5 AND 6 INS



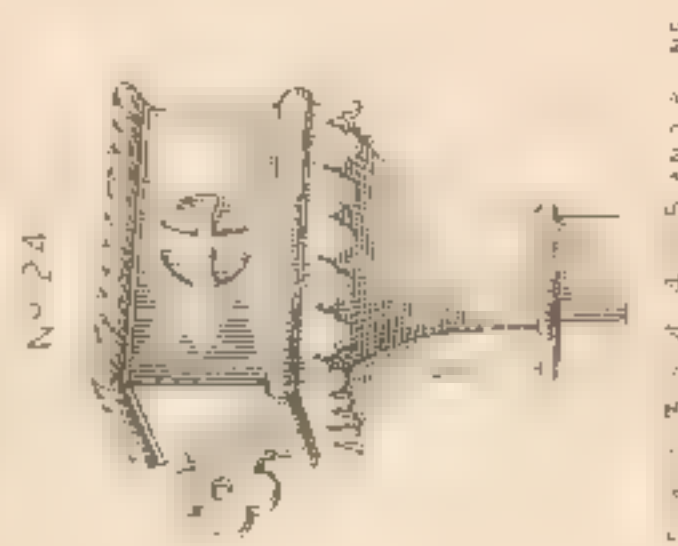
21 3 3 4 4 2.5 AND 6 INS



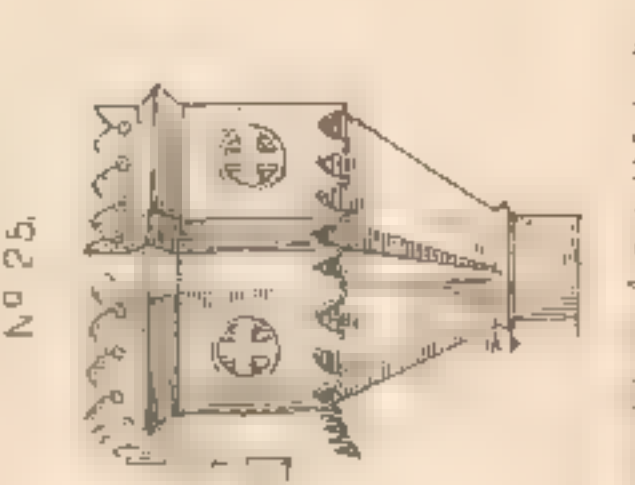
22 3 3 4 4 2.5 AND 6 INS



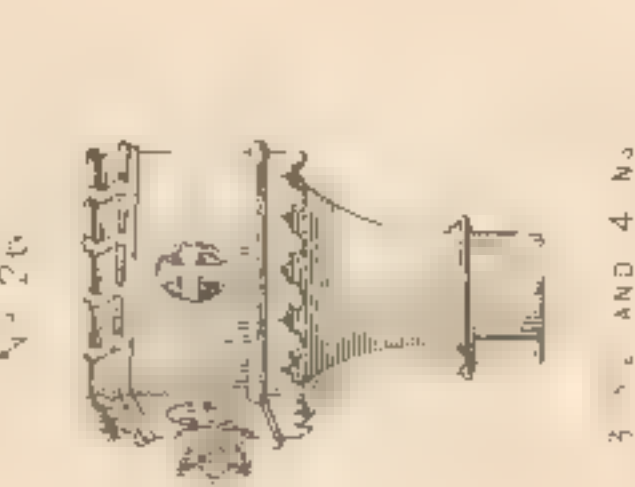
23 4 4 2.5 AND 6 INS



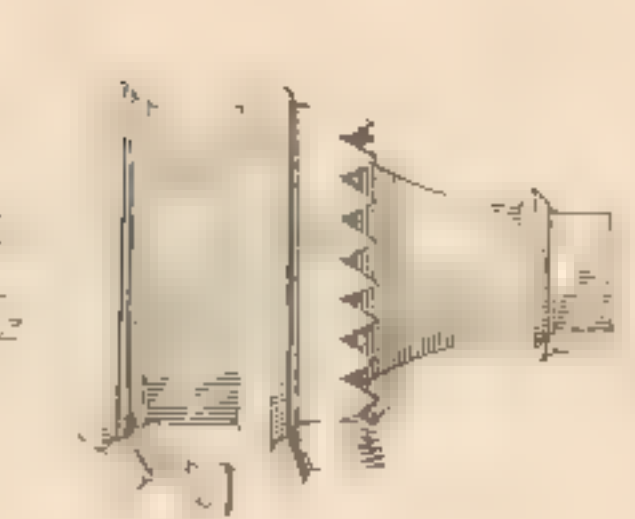
24 3 3 4 4 2.5 AND 6 INS



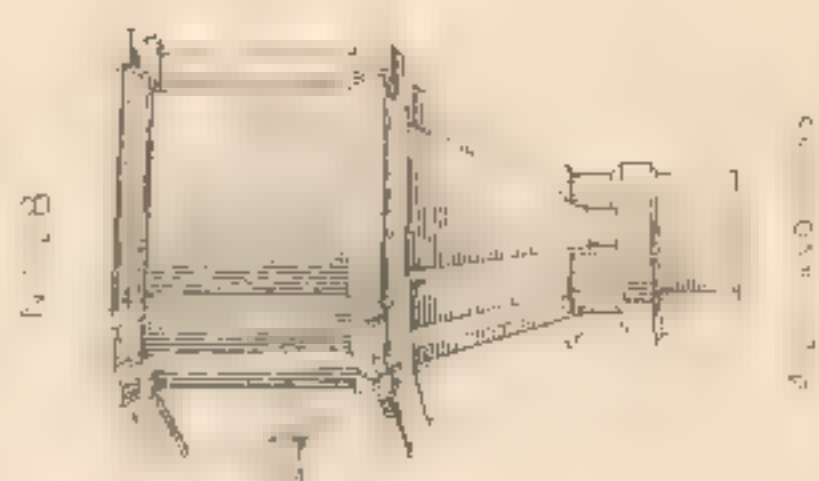
25 4 4 2.5 AND 6 INS



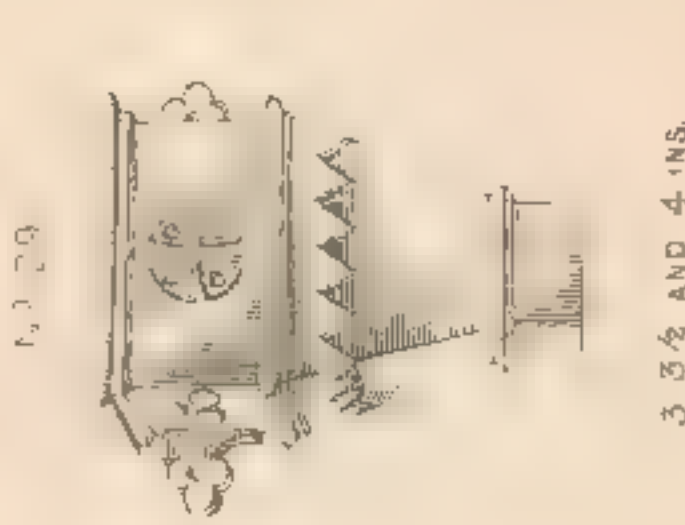
26 3 3 4 4 2.5 AND 6 INS



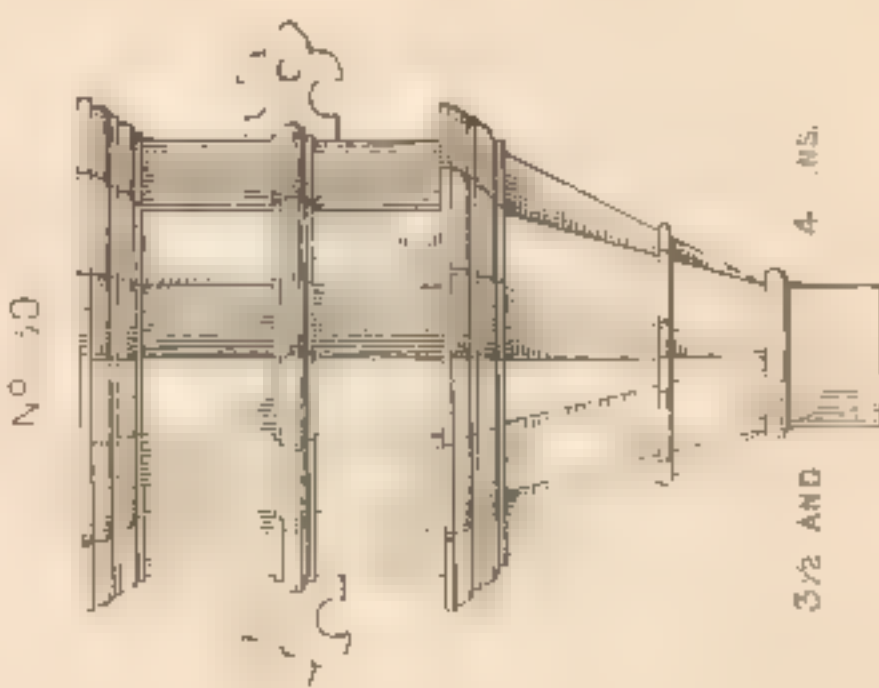
27 3 3 4 4 2.5 AND 6 INS



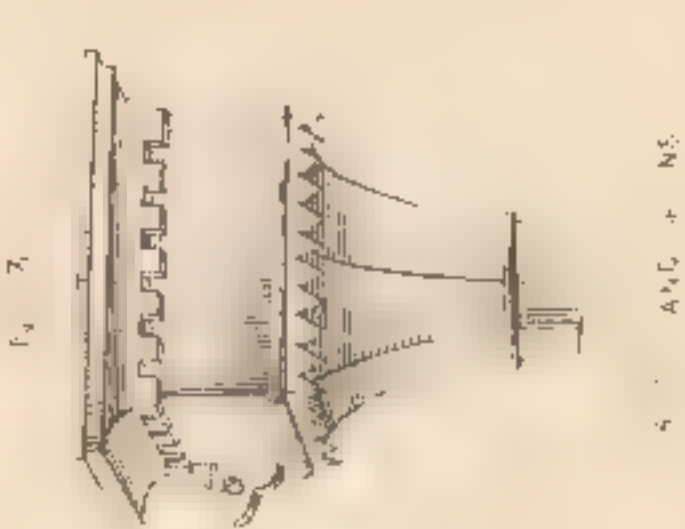
28 4 4 2.5 AND 6 INS



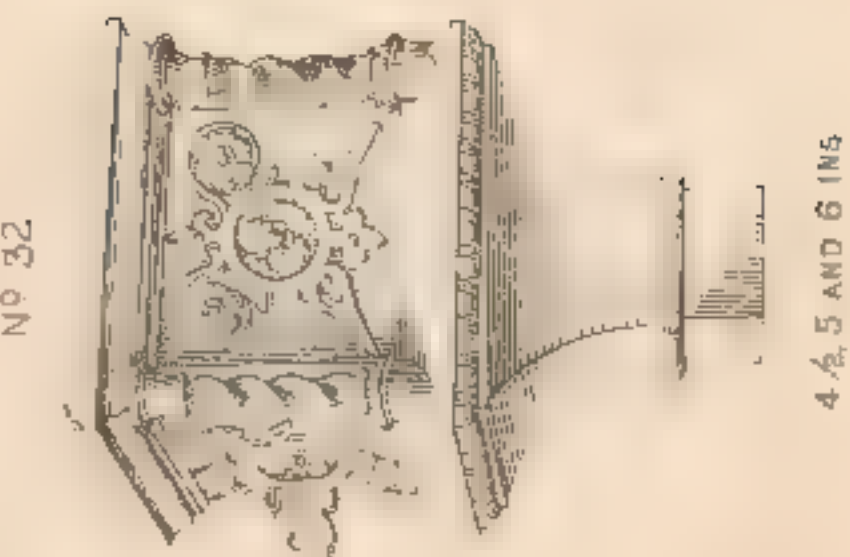
29 3 3 4 4 2.5 AND 6 INS



30 3 3 4 4 2.5 AND 6 INS



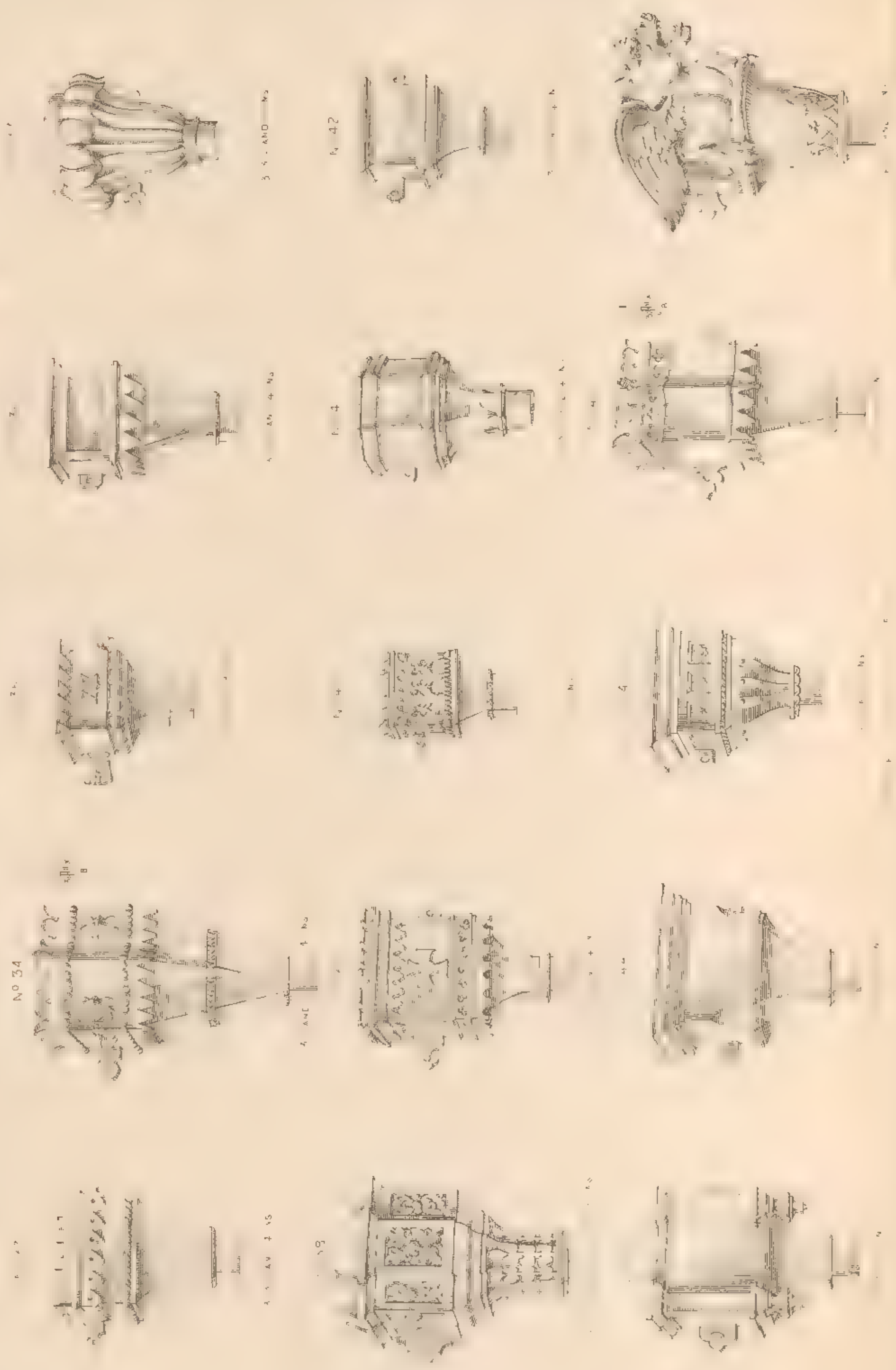
31 3 3 4 4 2.5 AND 6 INS



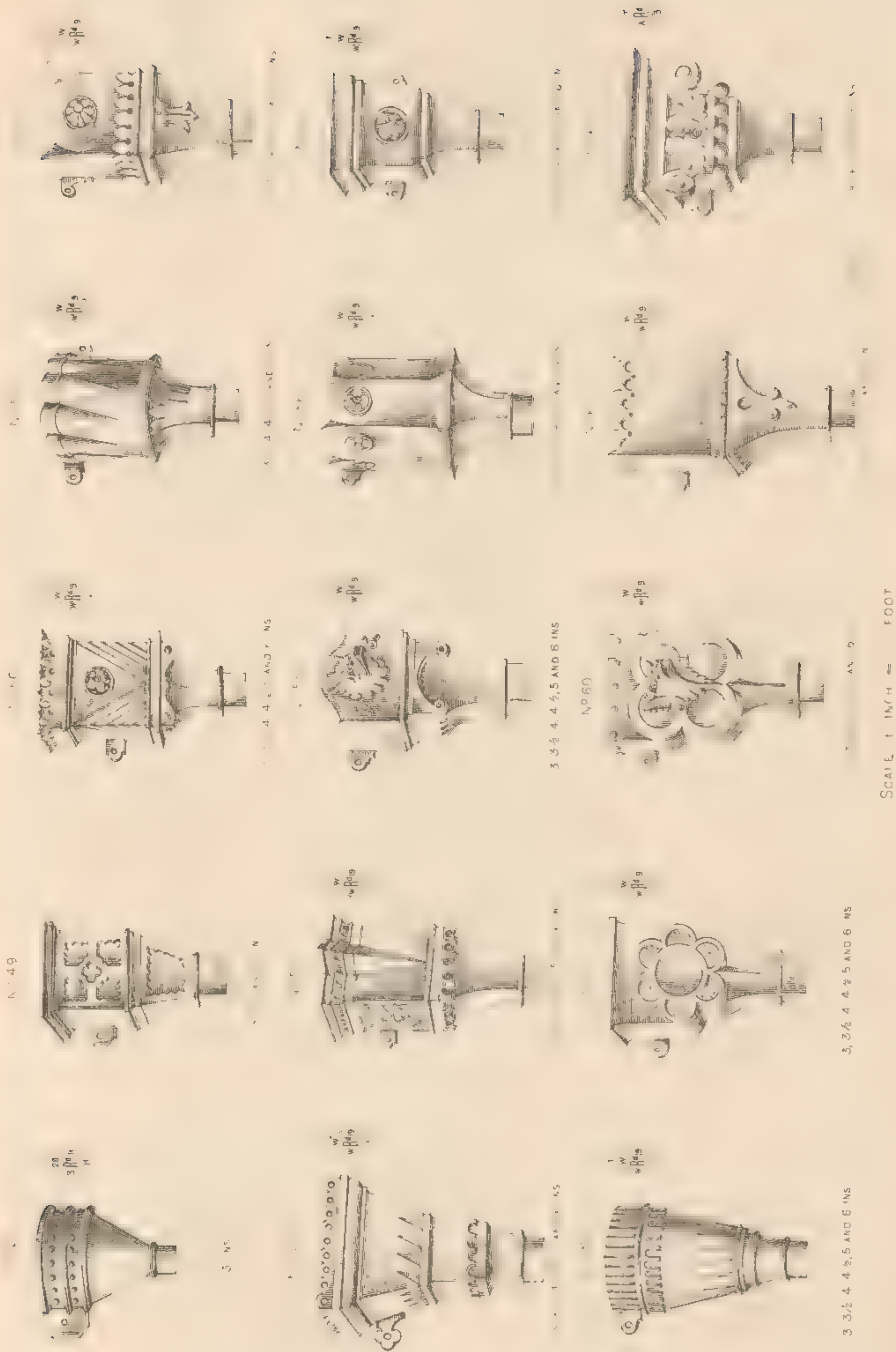
32 4 4 2.5 AND 6 INS

SCALE 1 INCH = 1 FOOT

IMPROVED PATENT OF JAMES A. ROY, GATE VALVE SEAT



MACFARLANE'S PATENT ORNAMENT. RAIN WATER PIPE HEADS.



MACFARLANE'S PATENT ORNAMENTAL RAIN WATER PIPE HEADS



Fig. 1



Fig. 2

Fig. 3

Fig. 4

Fig. 5



Fig. 6

Fig. 7

Fig. 8



Fig. 9

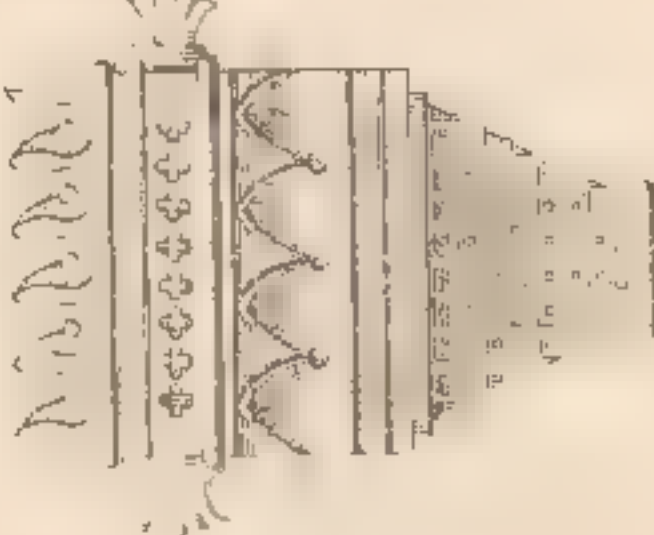


Fig. 10

Fig. 11

Fig. 12



Fig. 13

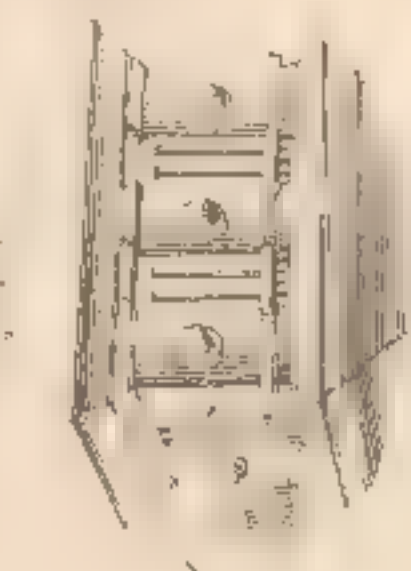


Fig. 14

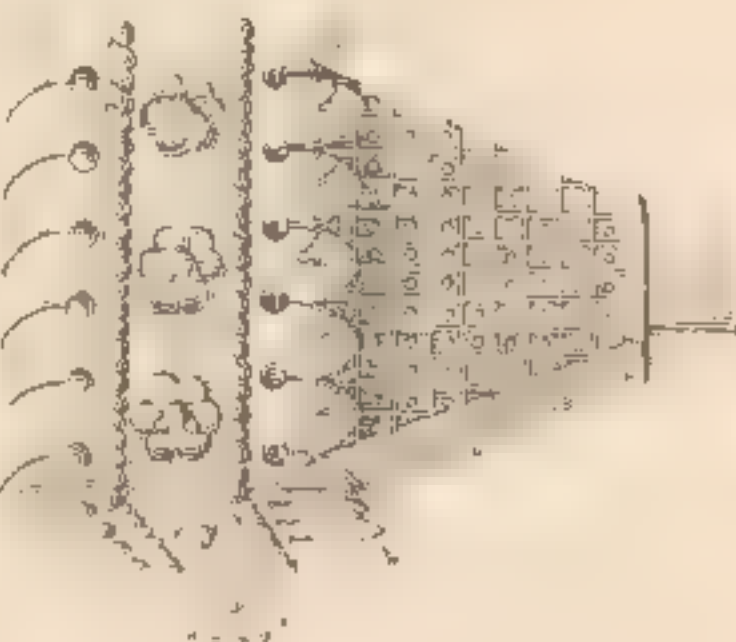


Fig. 15

Fig. 16

Fig. 17

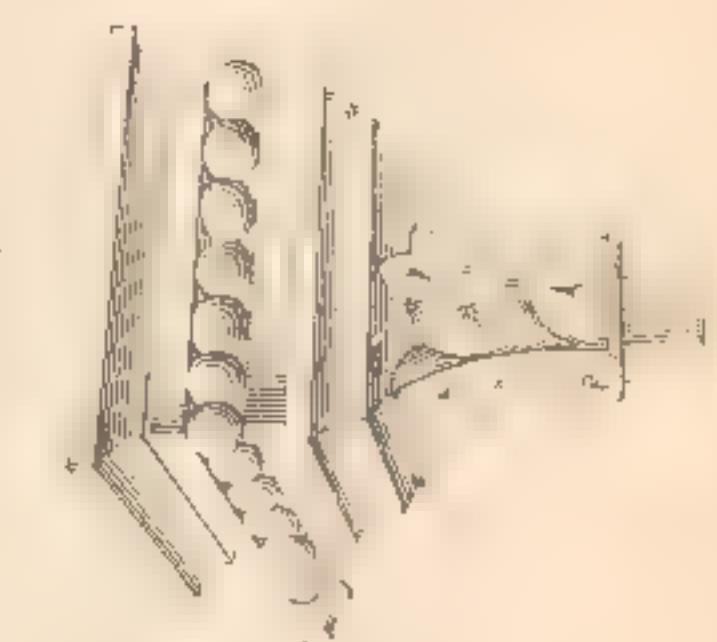


Fig. 18

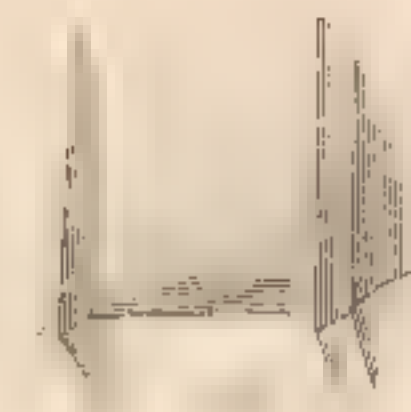


Fig. 19

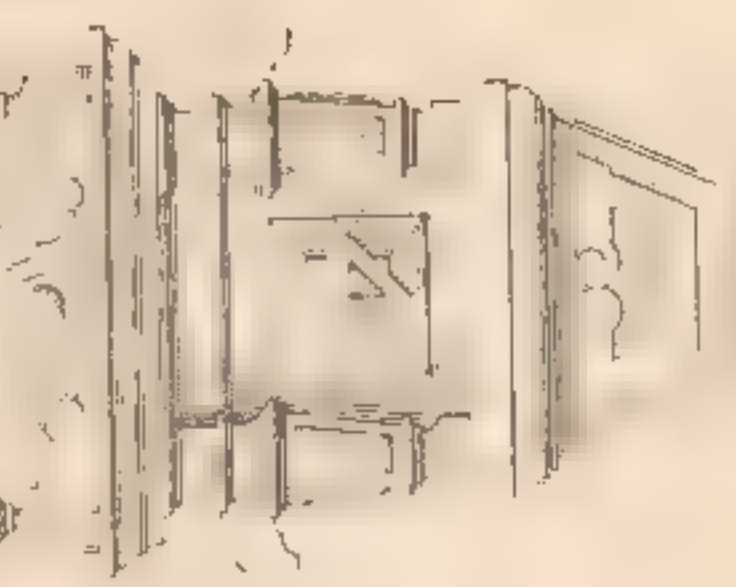


Fig. 20

Fig. 21

Fig. 22

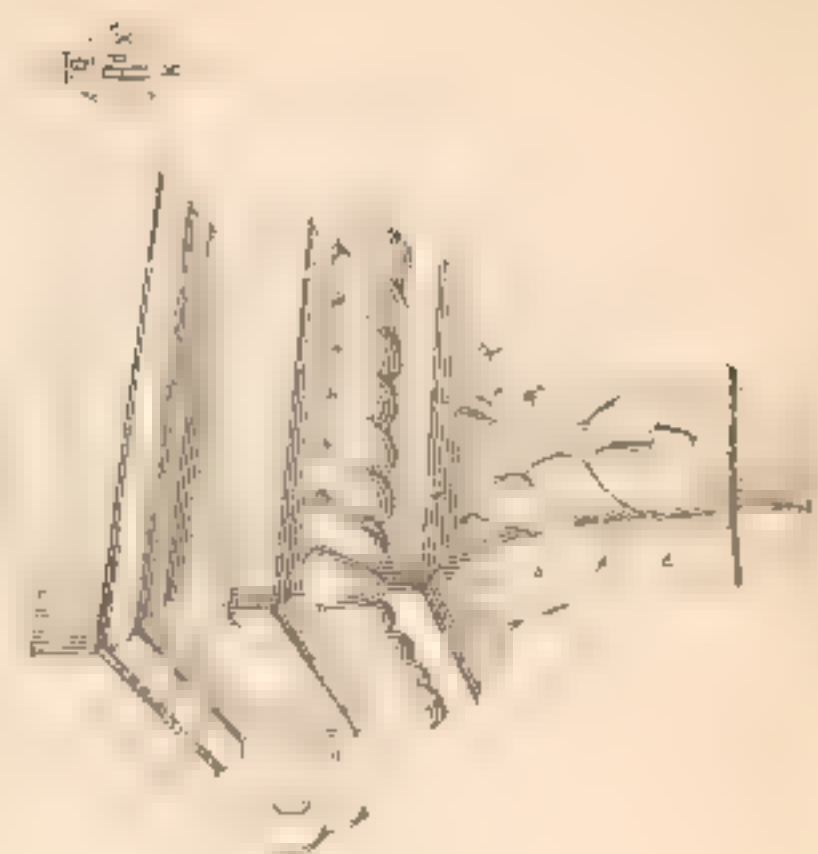


Fig. 23

MACFARLANE'S PATENT ORNAMENTAL RAIN WATER PIPE EARS

The fastenings for rain-water pipes were generally of the most primitive kind, until we introduced Ornamental Ears, which now give so much character to the pipes. It is sometimes desirable to put the date of the building on the Ear nearest the top, and Ornamental Ears on each faucet below. They are made to fit every pattern and size of pipe in our Catalogue, either for flat walls or angle corners. When they are for Nos. 4, 5, 6, 7, 8, 10, and 11, Ornamental Pipes, the belt is dispensed with, and a dovetail and socket joins the wing to each side of the pipe

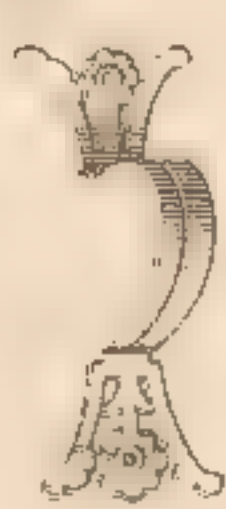


U. S. PATENT ORNAMENTAL RAIN WATER PIPE EARS

W
1899



W
1899



4



W
1899



W
1899



W
1899



W
1899



W
1899



W
1899



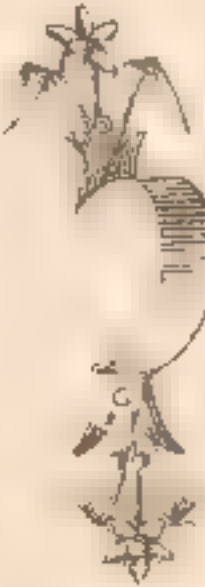
W
1899



W
1899



W
1899



W
1899



W
1899



1 3 0

1 4 5 4



W
1899

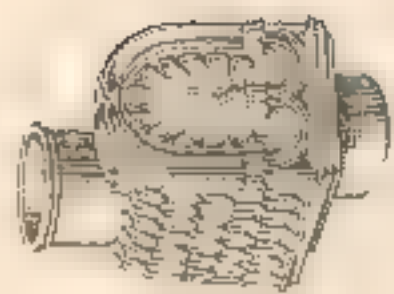


W
1899



MACFARLANE'S PATENT ORNAMENTAL PIPE CONNECTIONS

Nº 4 OFFSET



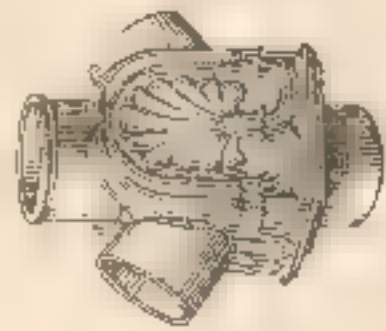
Nº 4 OBTUSE ELBOW



Nº 4 SINGLE BRANCH



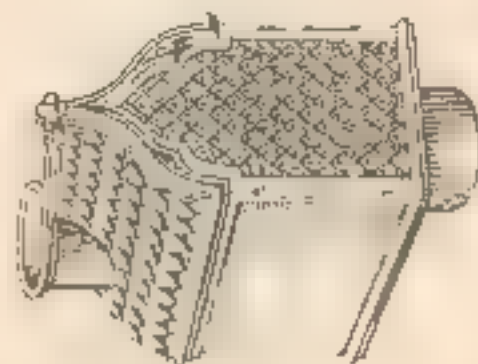
Nº 4 DOUBLE BRANCH



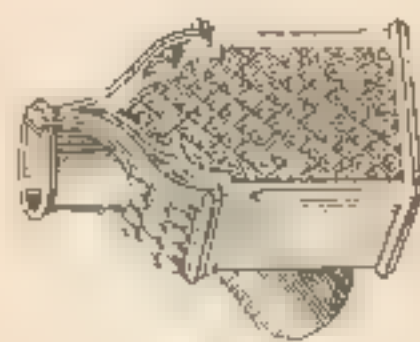
Nº 4 BACK BRANCH



Nº 5 OFFSET



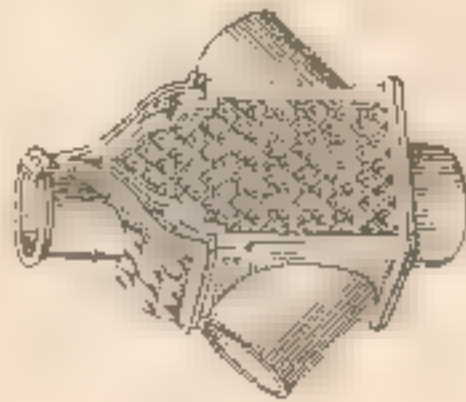
Nº 5 OBTUSE ELBOW



Nº 5 SINGLE BRANCH



Nº 5 DOUBLE BRANCH



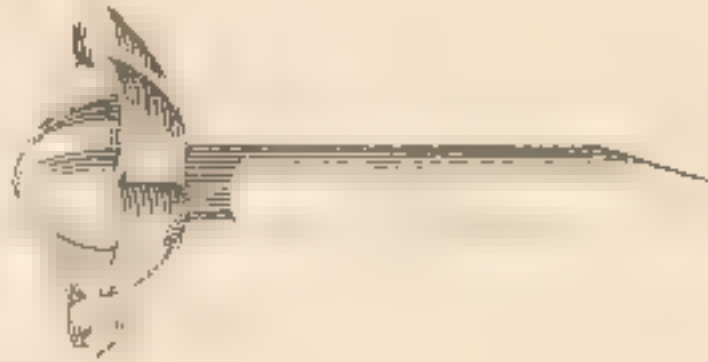
Nº 5 BACK BRANCH



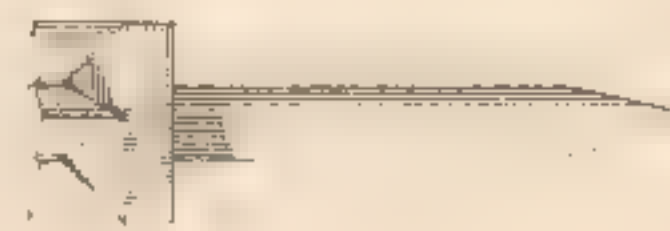
Nº 5 PEDESTAL



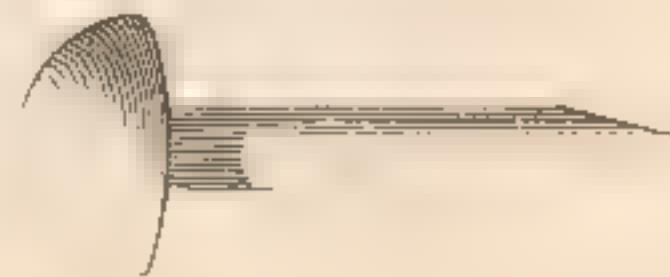
Nº 2 SPIKE



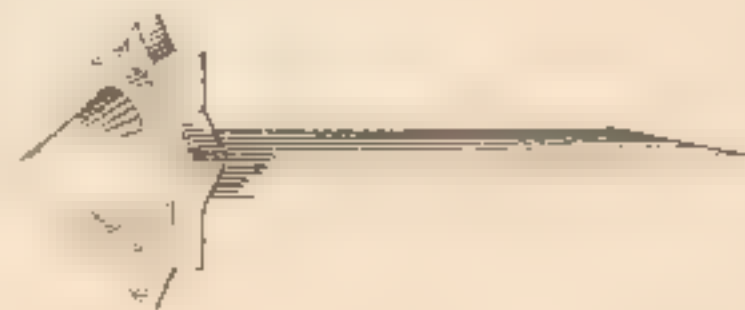
Nº 3 SPIKE



Nº 4 SPIKE



Nº 5 SPIKE



HALF FULL SIZE

HALF FULL SIZE

HALF FULL SIZE

HALF FULL SIZE



Crests, Monograms, Dates, &c., can be cast on any of our fittings *to order*.

PEDESTAL We have introduced this new run water pipe connection for the purpose of making a proper junction between the conductor pipe and the underground drains, and by thus connecting them providing the best means of ventilating the sewers by carrying their heated vapours over the house-tops.

We can supply Nos. 4 and 5 Offset for any projection of plinth, and any of the connections on this page, of a proportionate size for every pattern and size of pipe in our Catalogue.

SCALE 1 INCH = FOOT

SECTION II.—GUTTERS.

EMBRACING STRAIGHT AND CIRCULAR GUTTERS, FOR RAIN-WATER, BUILDING CORNICES, BOUNDARY WALLS, SHEDS, VALLEY ROOFS, WATER CONDUITS, CONSERVATORIES, &c.

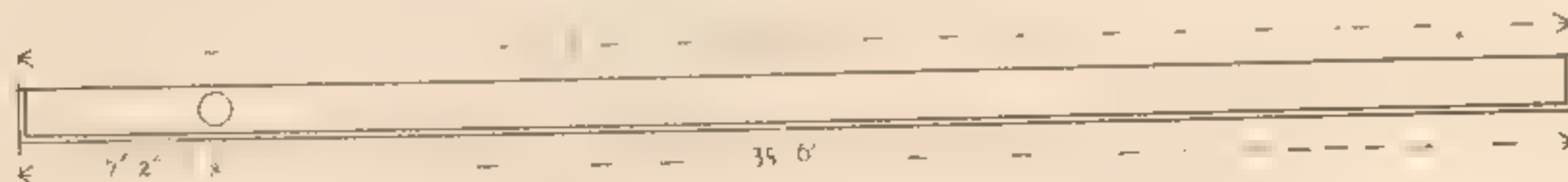
The growing importance of this branch of trade has induced us to seek for simpler and more perfect methods of production than have hitherto been in use; and our labours in this direction have entirely changed the system of manufacture formerly pursued. We are now enabled to give a much greater variety of designs, along with a sharp regularity of moulding, that not only enhances the appearance, but also adds considerably to the strength of our Gutters.

DIRECTIONS FOR GIVING ORDERS.

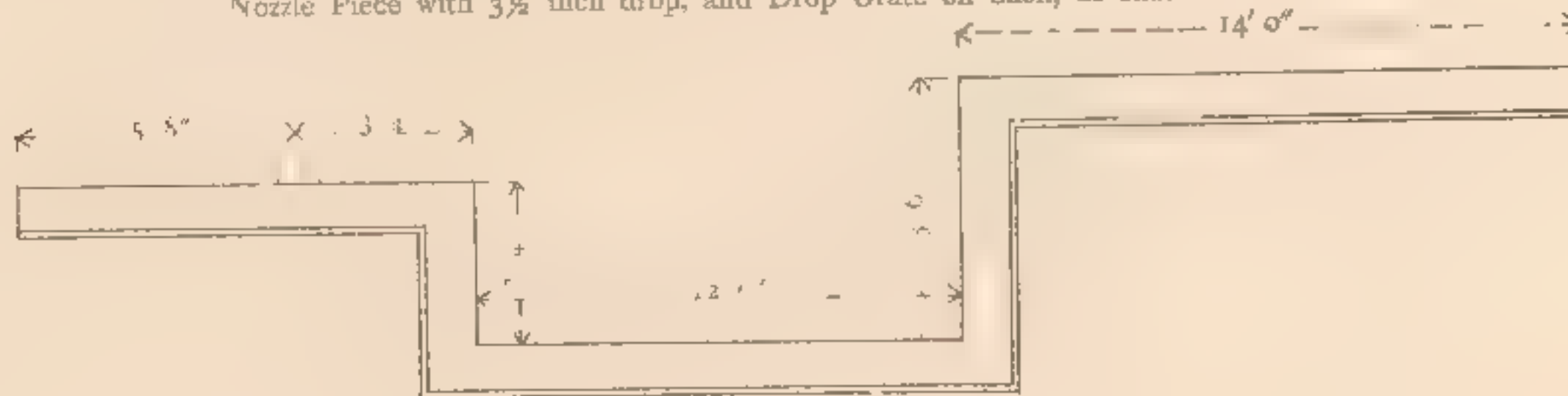
In ordering Gutters, our customers will please state the No. and size; and they may either order the required number of 6 feet lengths, along with the necessary quantity and description of Angles, Stop Ends, &c, and cut them to suit the buildings themselves, or by giving us a plan of the building, with the exact measurements, we will furnish them accordingly, all properly marked and ready for fitting up. The No. and size of downpipe should always be stated.

The following examples show the simplest method of ordering and giving measurements for Gutters when they are wanted cut to particular sizes

- 1 Stretch of No. 8 Gutter $6 \times 4\frac{1}{2}$ inches, with Ornamental Stop Ends and Nozzle Piece with $3\frac{1}{2}$ inch drop, and Drop Grate, as sketch.
 1 No. 5, 12 inch Brackets for do. The back of Gutter and Brackets to be on the same line of wall.



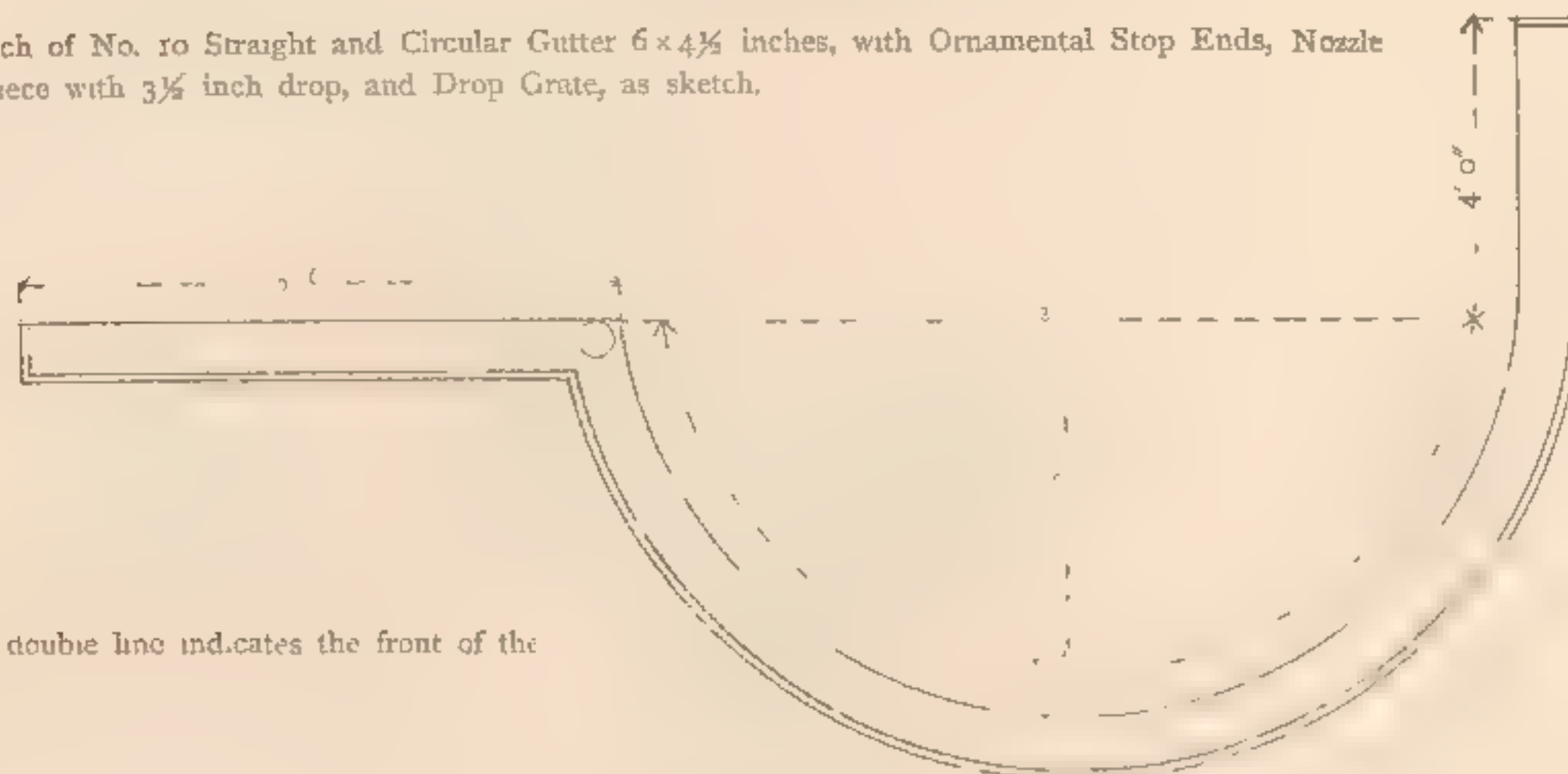
- 1 Stretch of No. 8 Gutter $6 \times 4\frac{1}{2}$ inches, with No. 1 Lion's Head every 3 feet, Plain Stop End, Nozzle Piece with $3\frac{1}{2}$ inch drop, and Drop Grate on back, as sketch.



- 1 Stretch of No. 8 Gutter $6 \times 4\frac{1}{2}$ inches, with Ornamental Stop Ends, Nozzle Piece with $3\frac{1}{2}$ inch drop, and Drop Grate on corner, as sketch.



- 1 Stretch of No. 10 Straight and Circular Gutter $6 \times 4\frac{1}{2}$ inches, with Ornamental Stop Ends, Nozzle Piece with $3\frac{1}{2}$ inch drop, and Drop Grate, as sketch.



Note.—The double line indicates the front of the Gutter

MACFARLANE'S PATENT HALF ROUND GUTTERS AND CONNECTIONS GUTTERS IN 2, 3, 4, AND 6 FEET LENGTHS.

These are generally used for the commonest class of buildings, and may either be fitted up with hooks attached to the boarding, or supported on brackets attached to the wall.



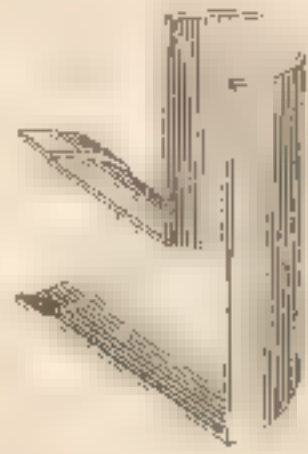
No 2

SEPT. 1881. S. L. C. T. DE MEAS. RE

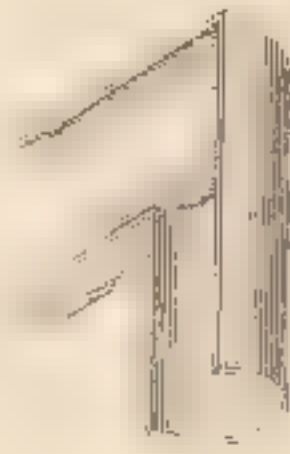
3, 3 1/2, 4, 4 1/2, 5, 6 AND 8 INS

3 3/4 4, 4 1/2 5, 6 7, 8, 9 AND 10 INS

LEFT HAND ANGLE



RIGHT HAND ANGLE



NOZZLE PIECE



UNION CLIP



FAUCET STOP END



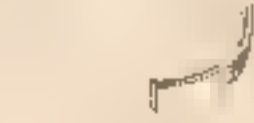
SPIGOT STOP END



No 1 BRACKET



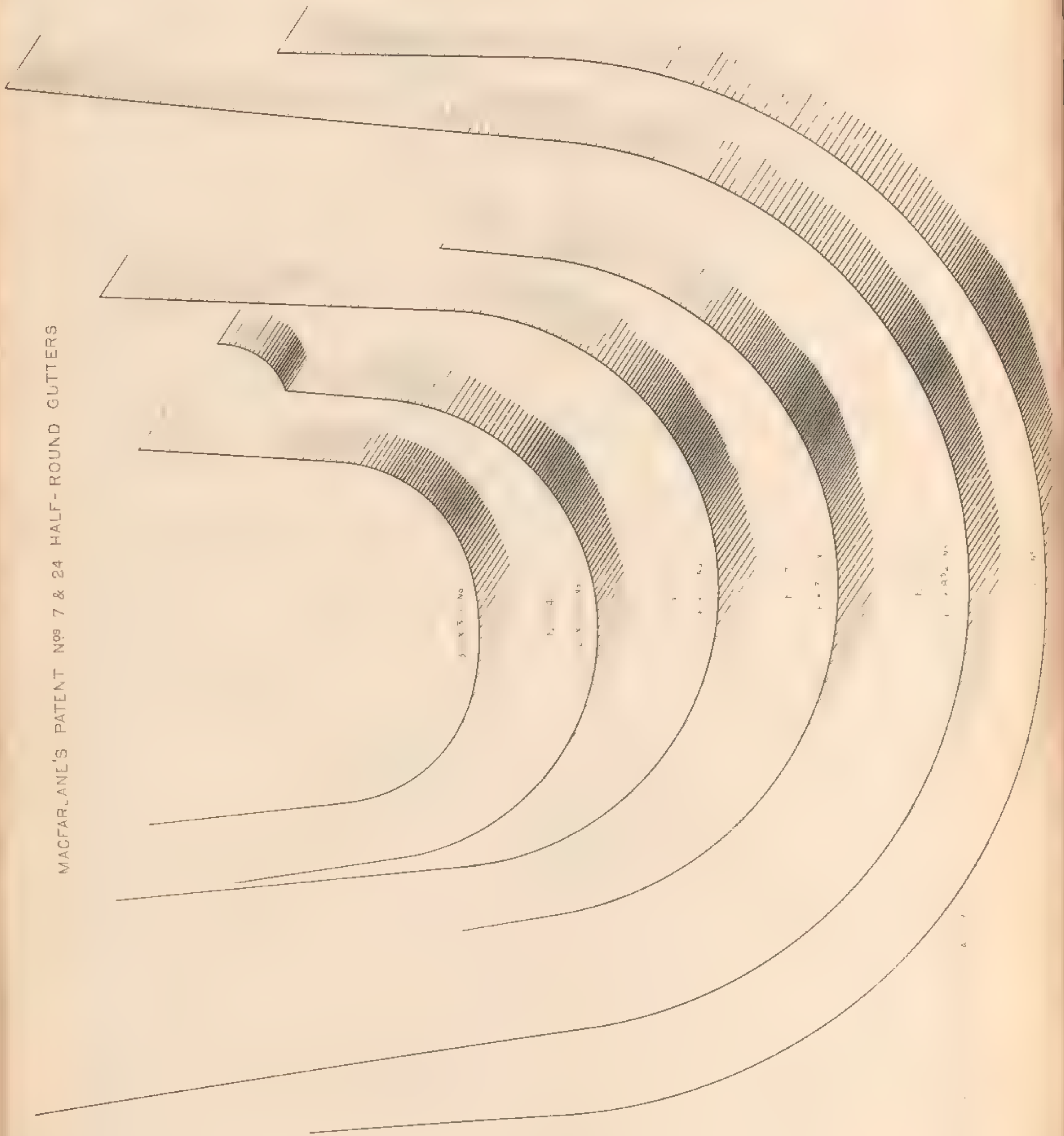
HOOK



BOLT & NUT



MACFARLANE'S PATENT Nos 7 & 24 HALF-ROUND GUTTERS



MACFARLANE'S PATENT O G GUTTERS AND CONNECTIONS

This is the simplest style of Gutter having a moulded front. In fitting up, the O G Gutters are generally attached to the woodwork of the roof by means of screws passing through the back of the Gutter. The Lion's Head on No. 6 is cast on each faucet.

No 5



4 x 2 1/2, 4 1/2 x 2 3/4, 5 x 2 3/4, 5 x 3 1/4, 6 x 3 AND 6 x 4 NS

No 6



4 x 2 1/2, 4 1/2 x 2 3/4, 5 x 2 3/4 AND 6 x 3 NS

FOR THE GUTTER BACK

No 5 INTERNAL ANGLE



No 5 EXTERNAL ANGLE



No 6 INTERNAL ANGLE



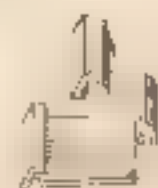
No 6 EXTERNAL ANGLE



No 5 NOZZLE PIECE



No 5 UNION CLIP



No 6 NOZZLE PIECE

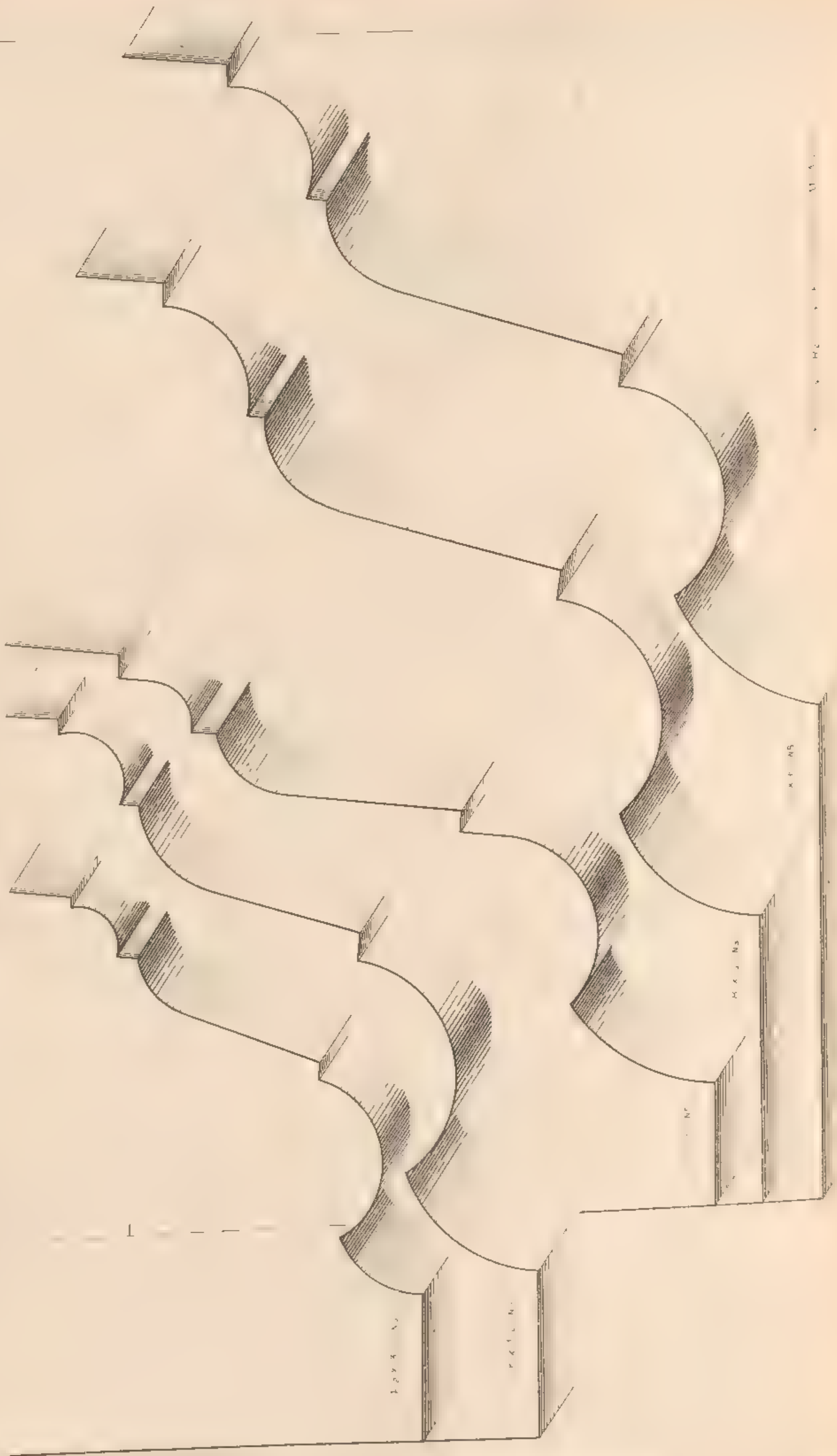


No 6 UNION CLIP

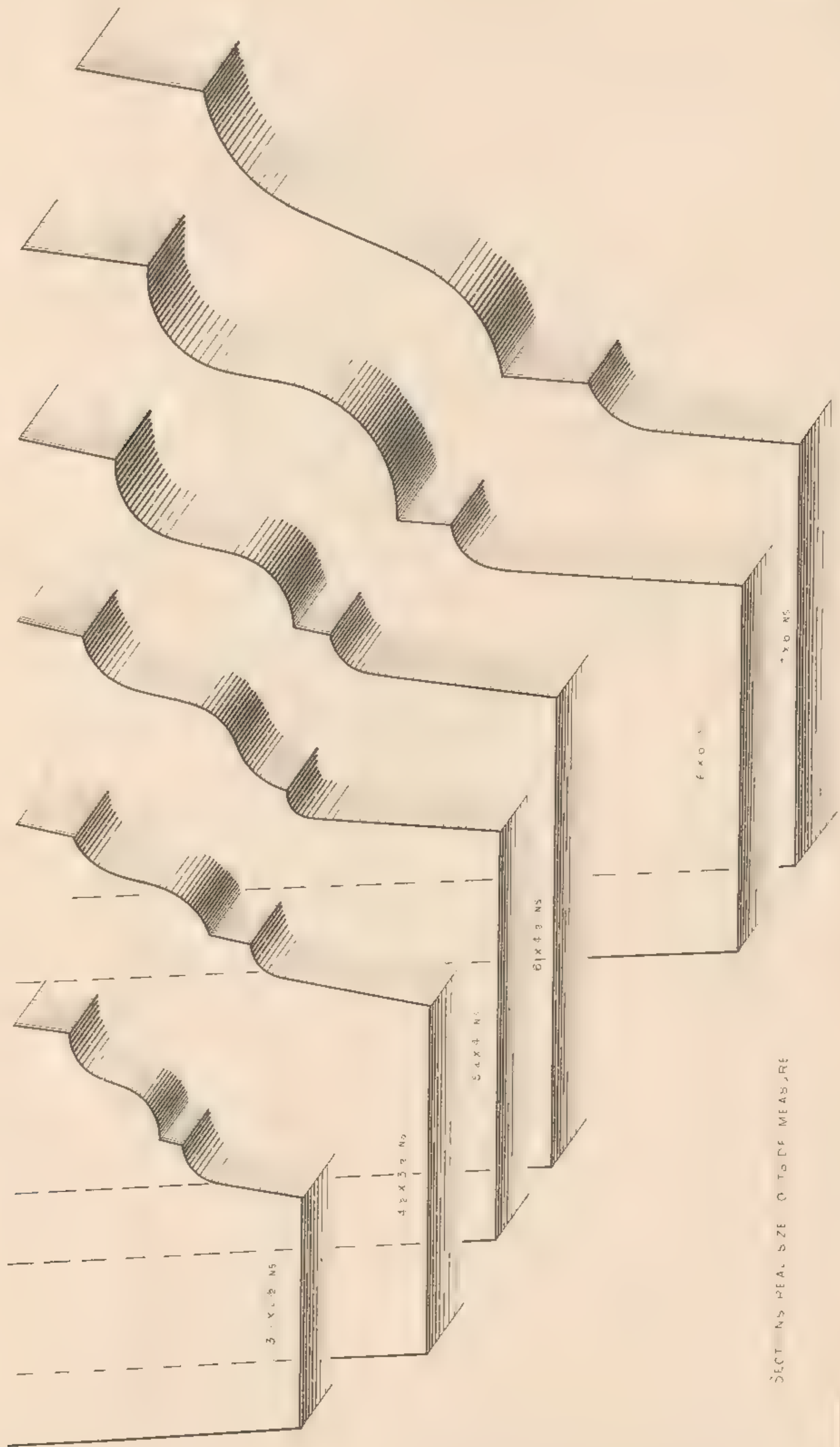


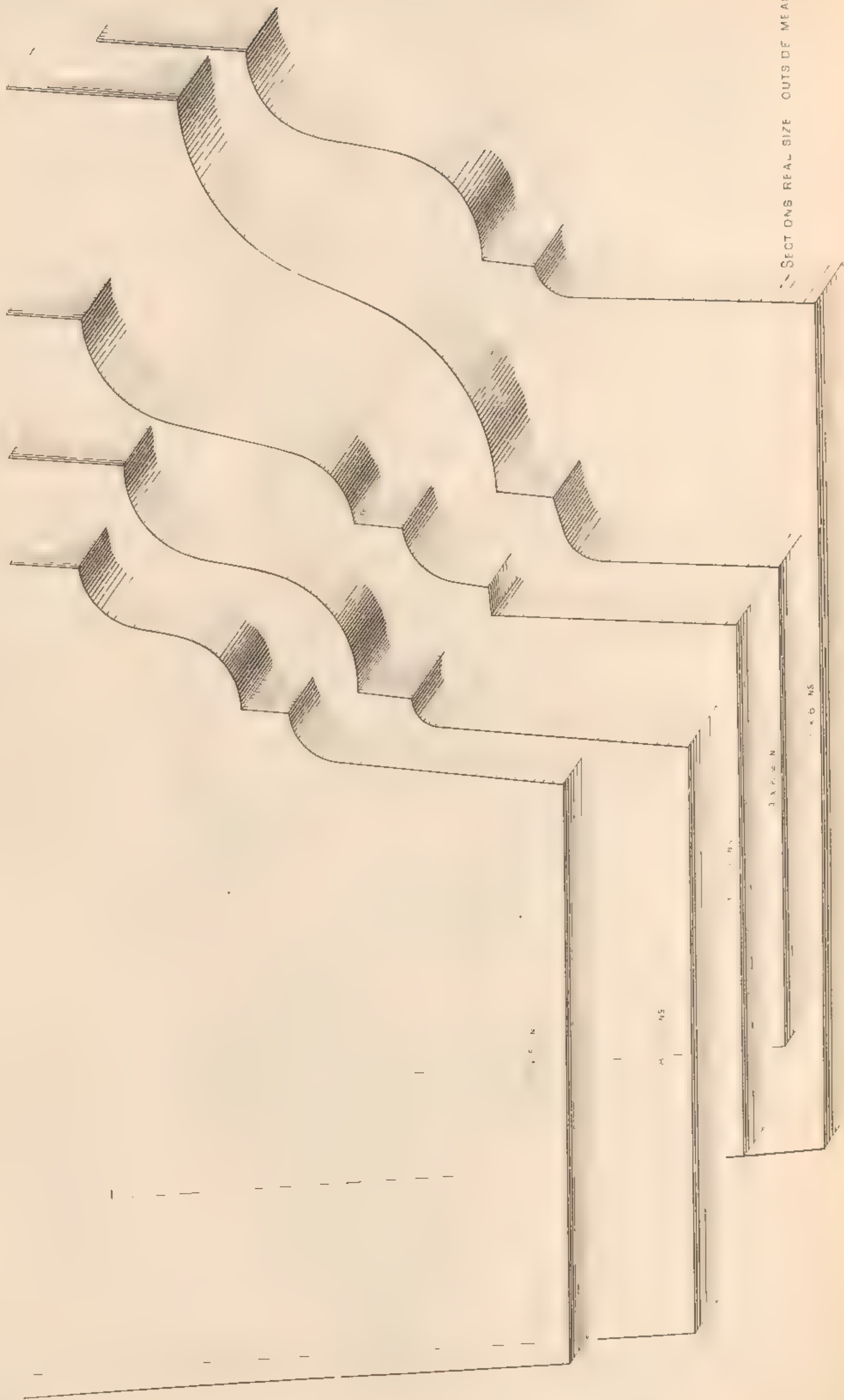
MACFARLANE'S PATENT NO 8 ORNAMENTAL GUTTERS

THESE GUTTERS ARE NOW VERY GENERALLY SUPERSEDING THE EXPENSIVE STONE OR WOODEN ONES USED WITH A DRAINAGE ALONG THE INSIDE SPACES, AND ARE MADE WITH INSIDE SPACES, THE GUTTERS TO THE EYE AN INTERESTING AND BEAUTIFUL



MACFARLANE'S PATENT NO 0 ORNAMENTAL GUTTERS





SECTION REAL SIZE OUTSIDE MEASURE

MACFARLANE'S PATENT NO 10 ORNAMENTAL GUTTERS.

0 x 7 1/4 INS
1 1/2 x 7 1/2 INS
2 x 7 INS

J. F. MACFARLANE

27

 $1\frac{1}{2} \times 7\frac{1}{2}$, NS

1237 MS

3456789

$$S \subseteq T \subseteq E \subseteq F \subseteq A \subseteq B$$

MACFARLANE'S PATENT NO. 11 ORNAMENTAL GUTTERS

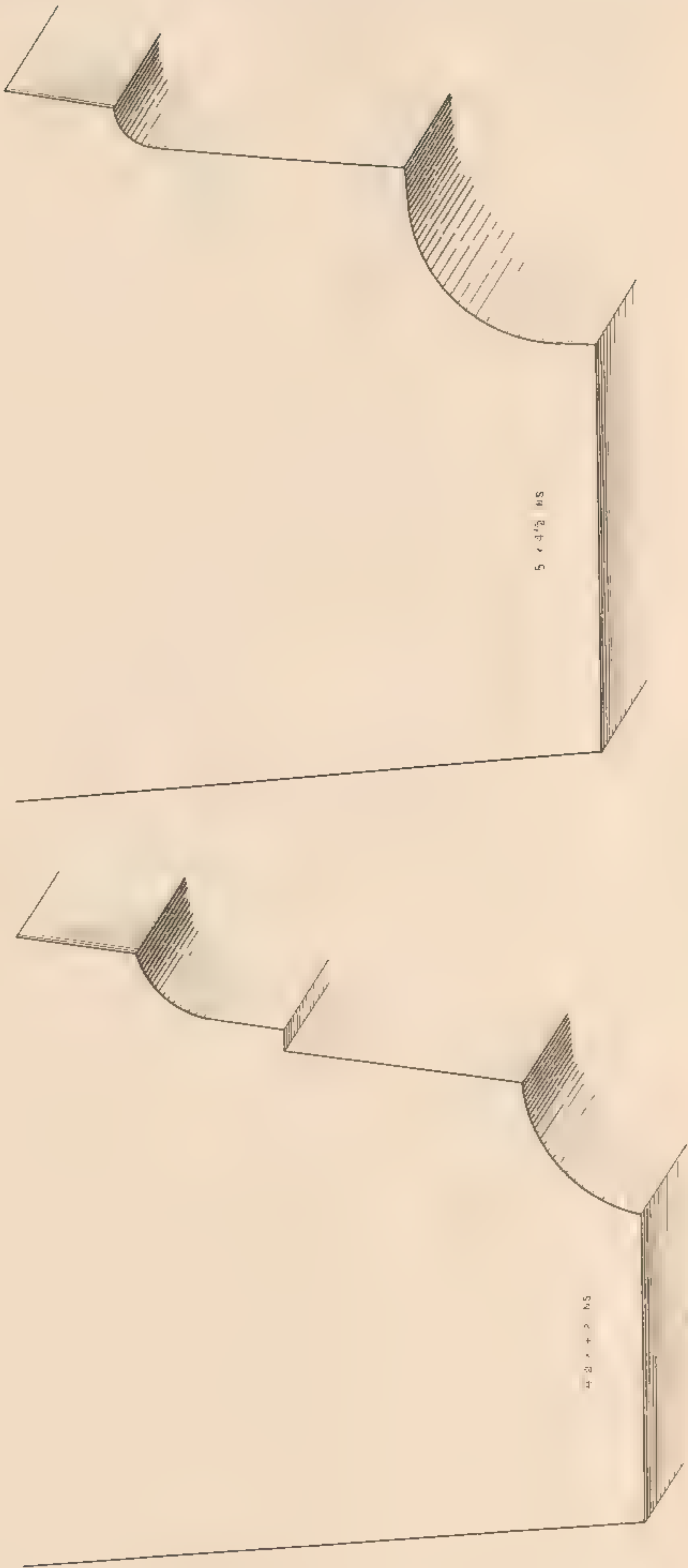
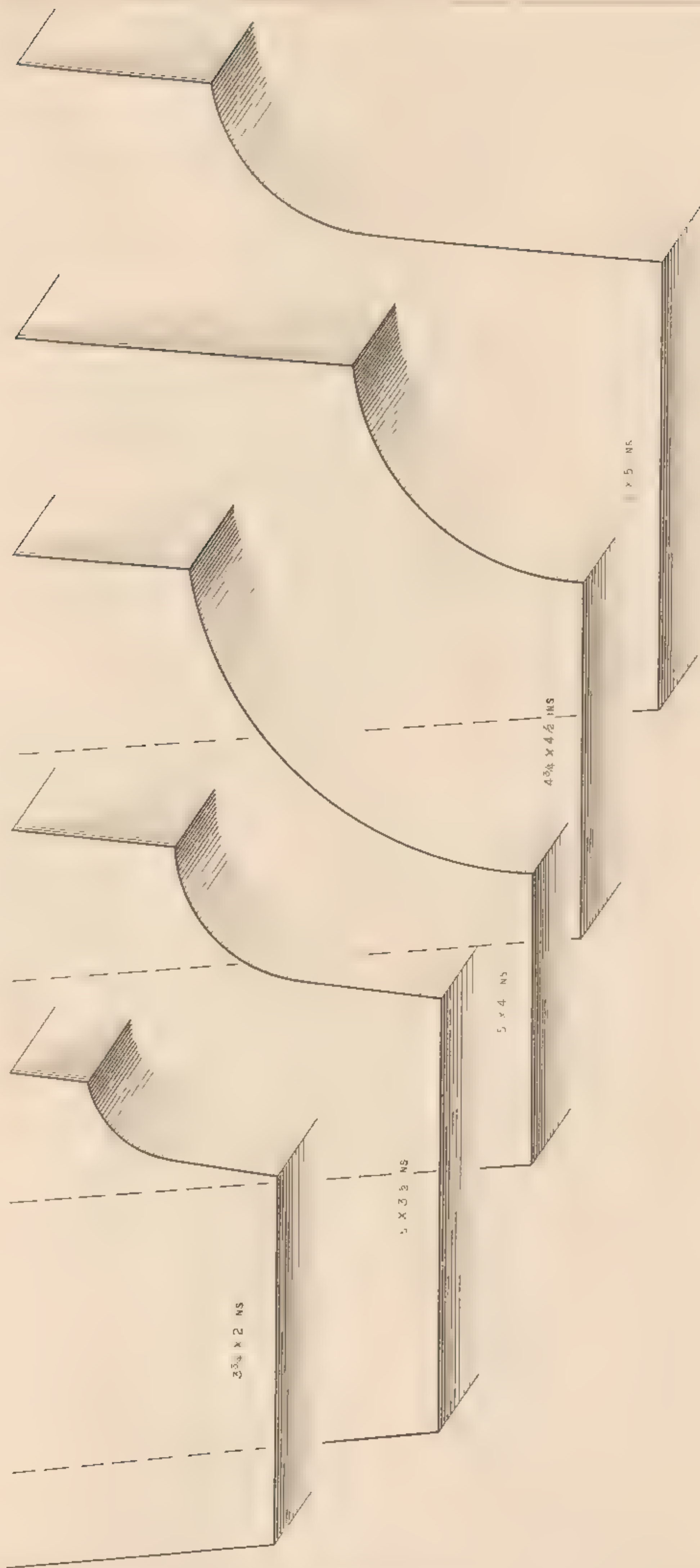


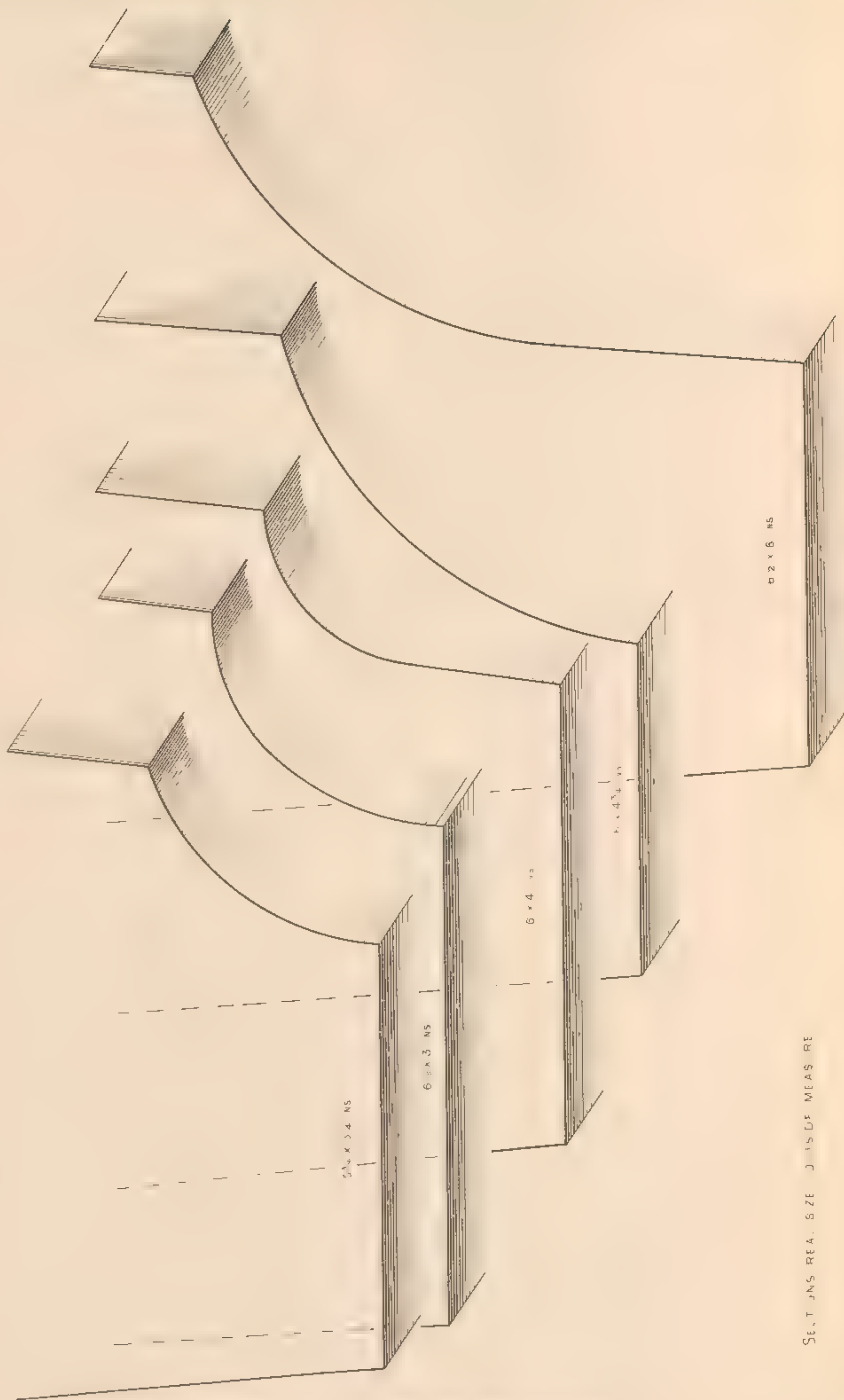
FIG. 1. SIDE ELEVATION. FIG. 2. END ELEVATION.

MACFARLANE'S PATENT Nº12 ORNAMENTAL GUTTERS



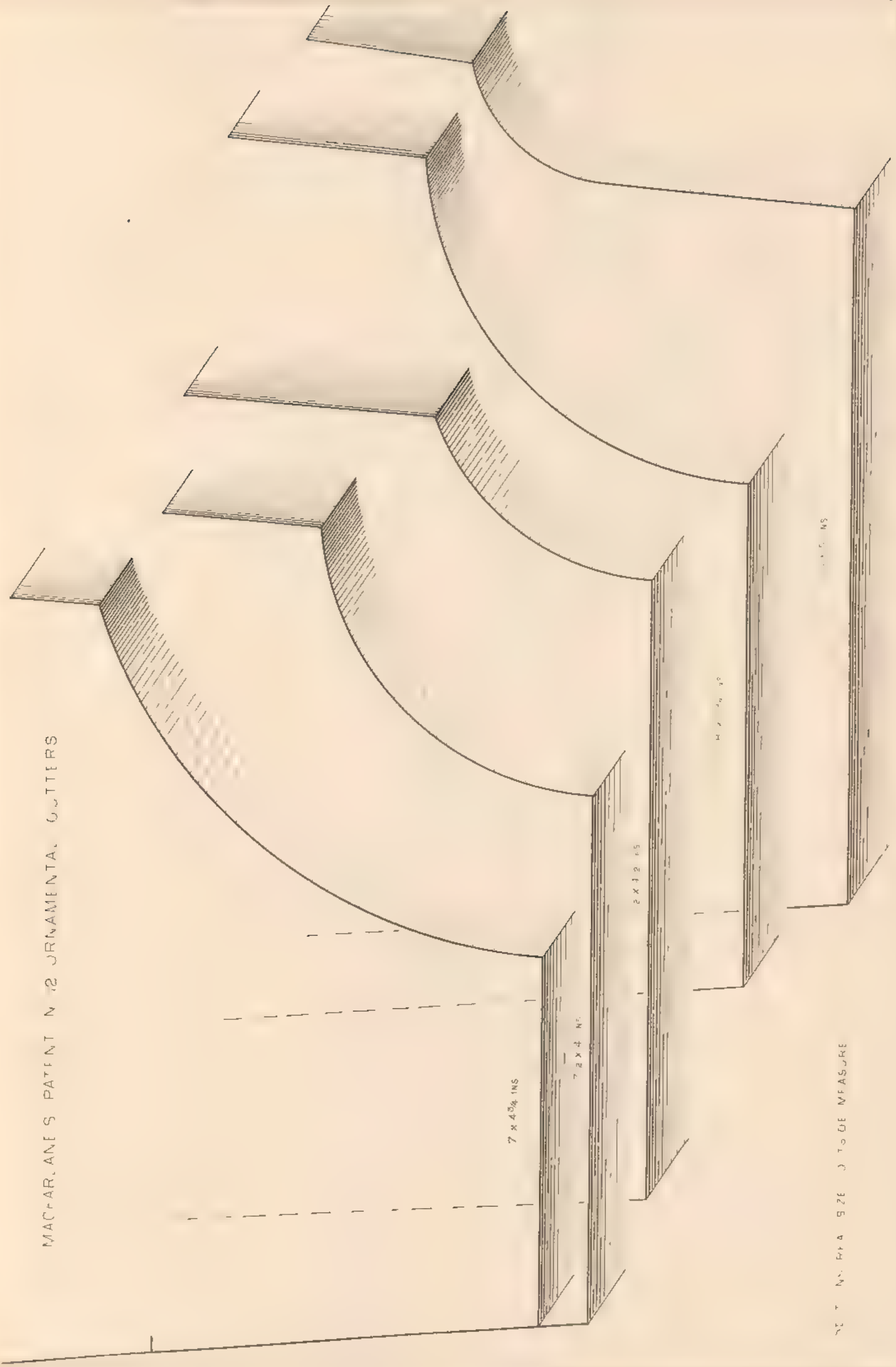
SECTIONS REAL SIZE, OUTSIDE MEASURE.

MACFARLANE'S PATENT NO 2 ORNAMENTAL GUTTERS.



SEE FIGS REA. SIZE J 15 DE MEAS RE

MACARANES PATENT NO. 2 ORNAMENTAL CUTTERS



7 x 4 3/4 INS

7 x 4 INS

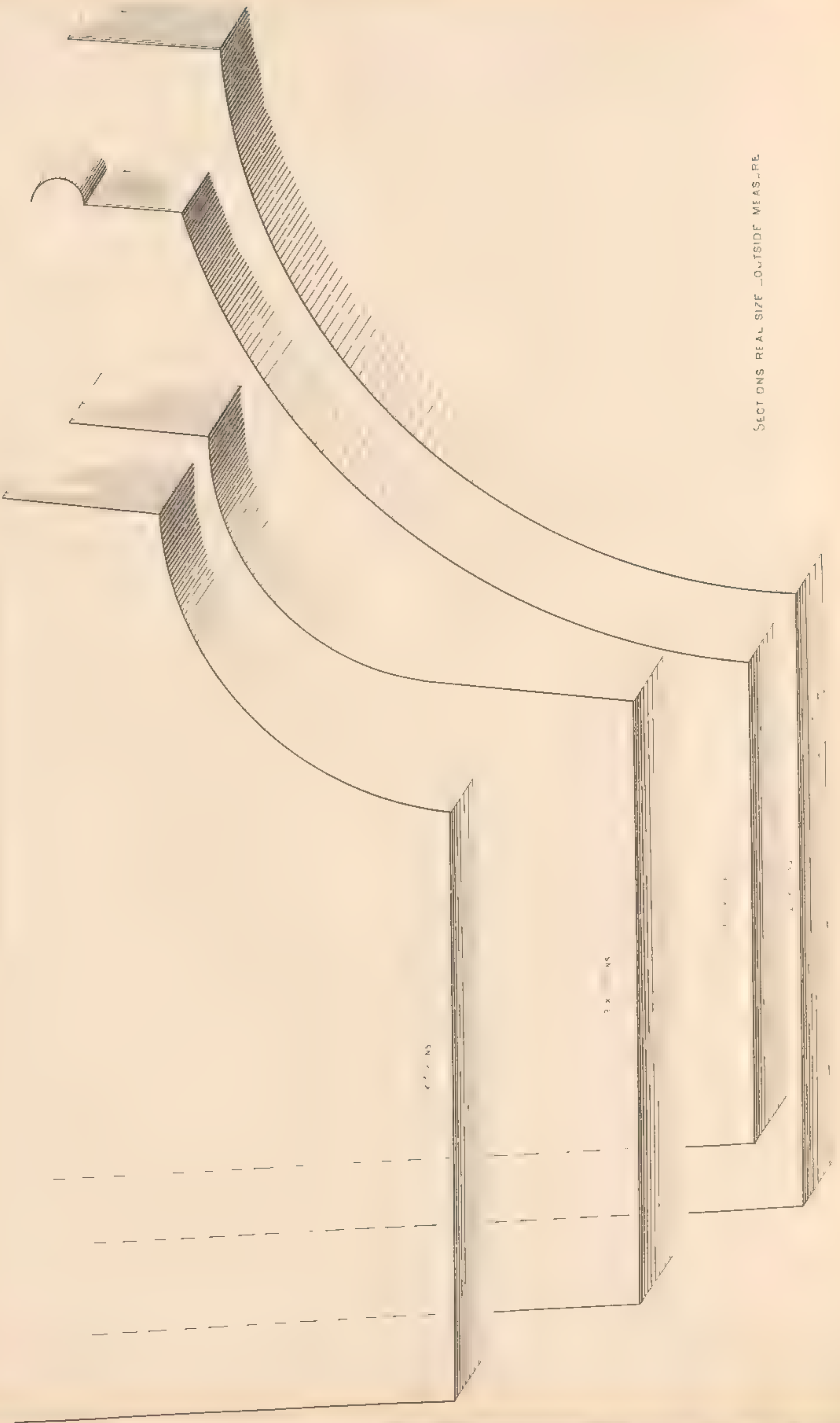
2 x 12 INS

4 x 12 INS

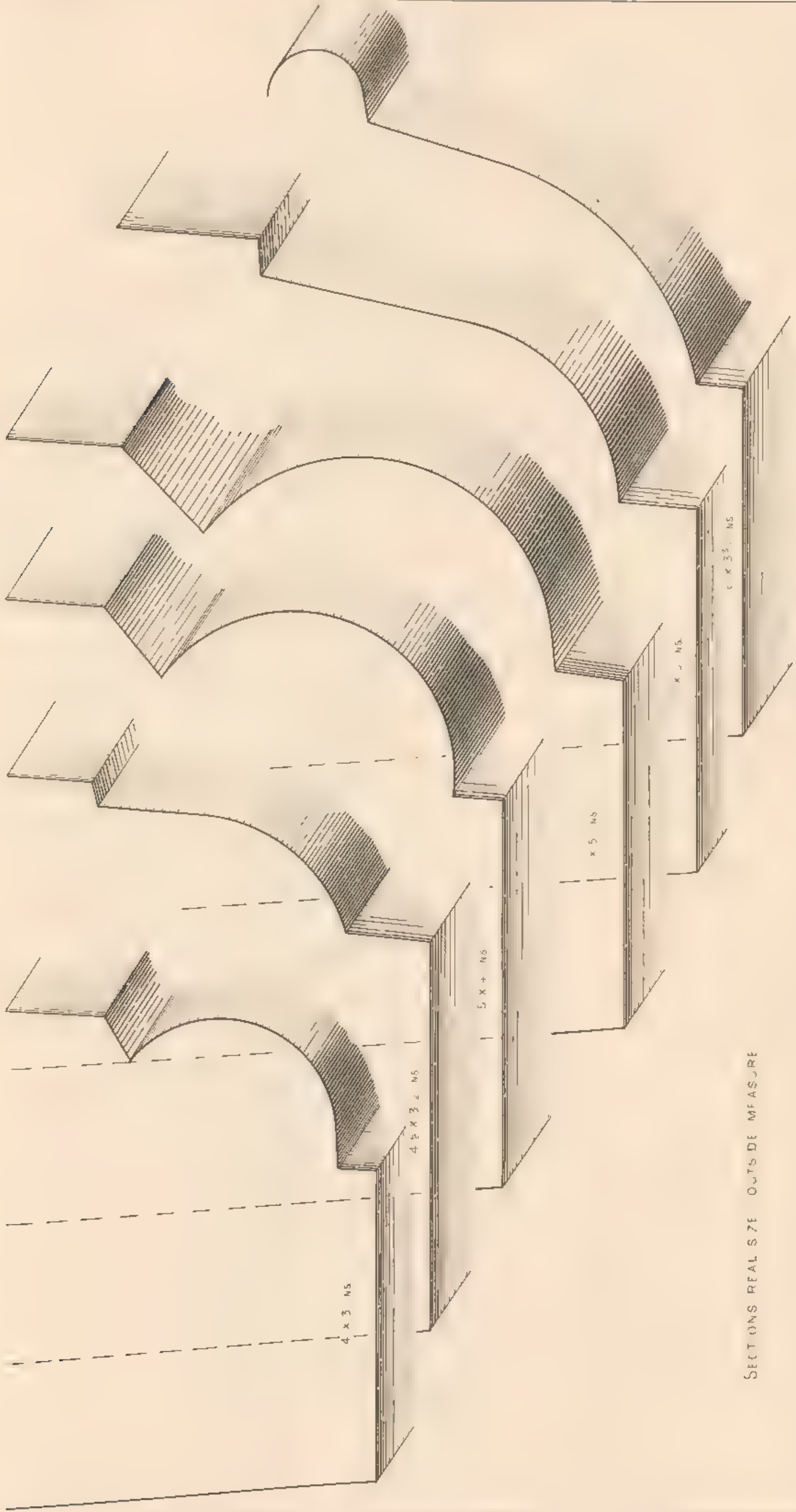
4 x 12 INS

NET NO. 414 SIZE 3 TO 6 MEASURE

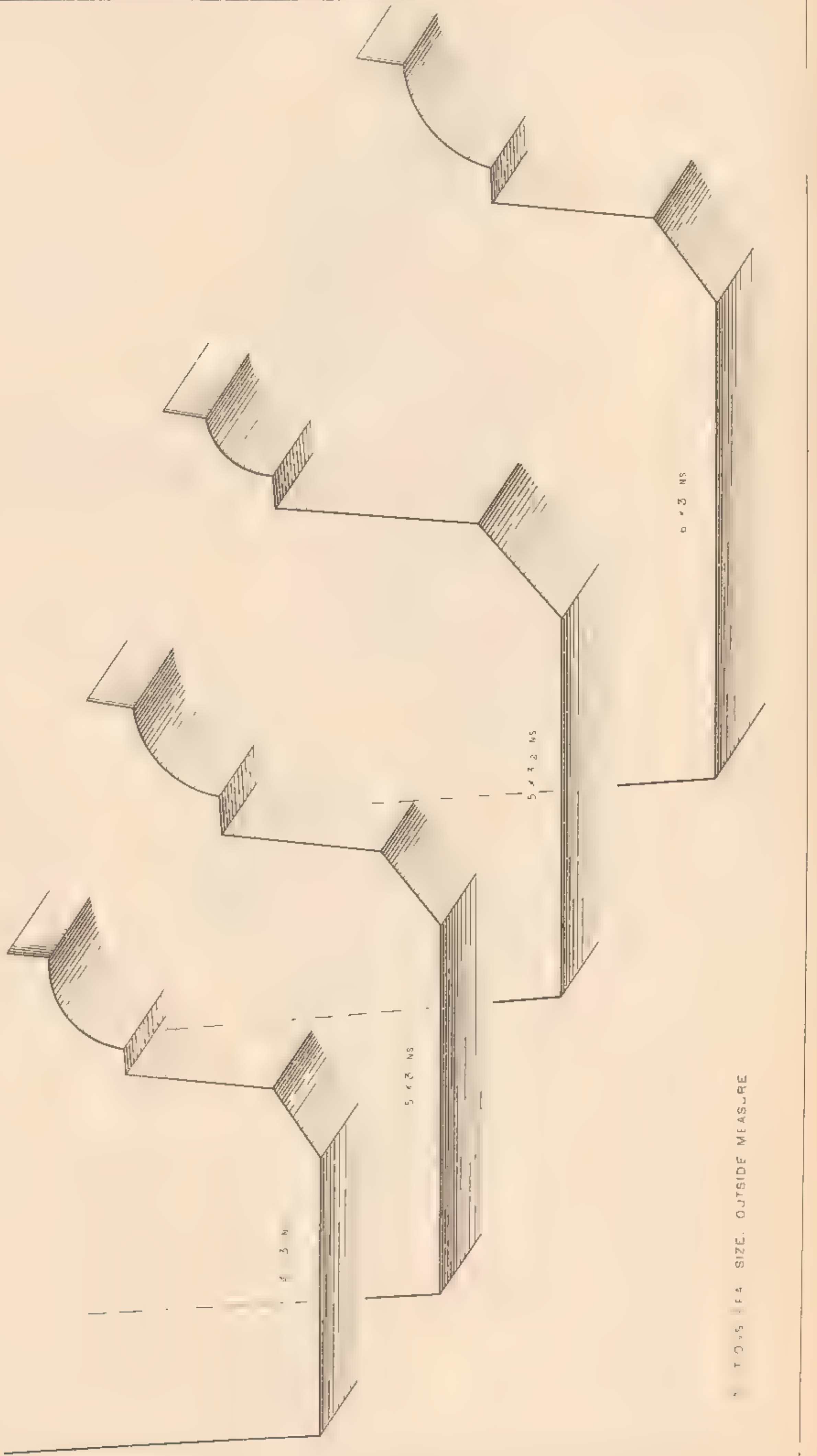
PLAN OF THE WATER TOWER AT THE TITERS



MACFARLANE'S PATENT NO 3 ORNAMENTAL GUTTERS

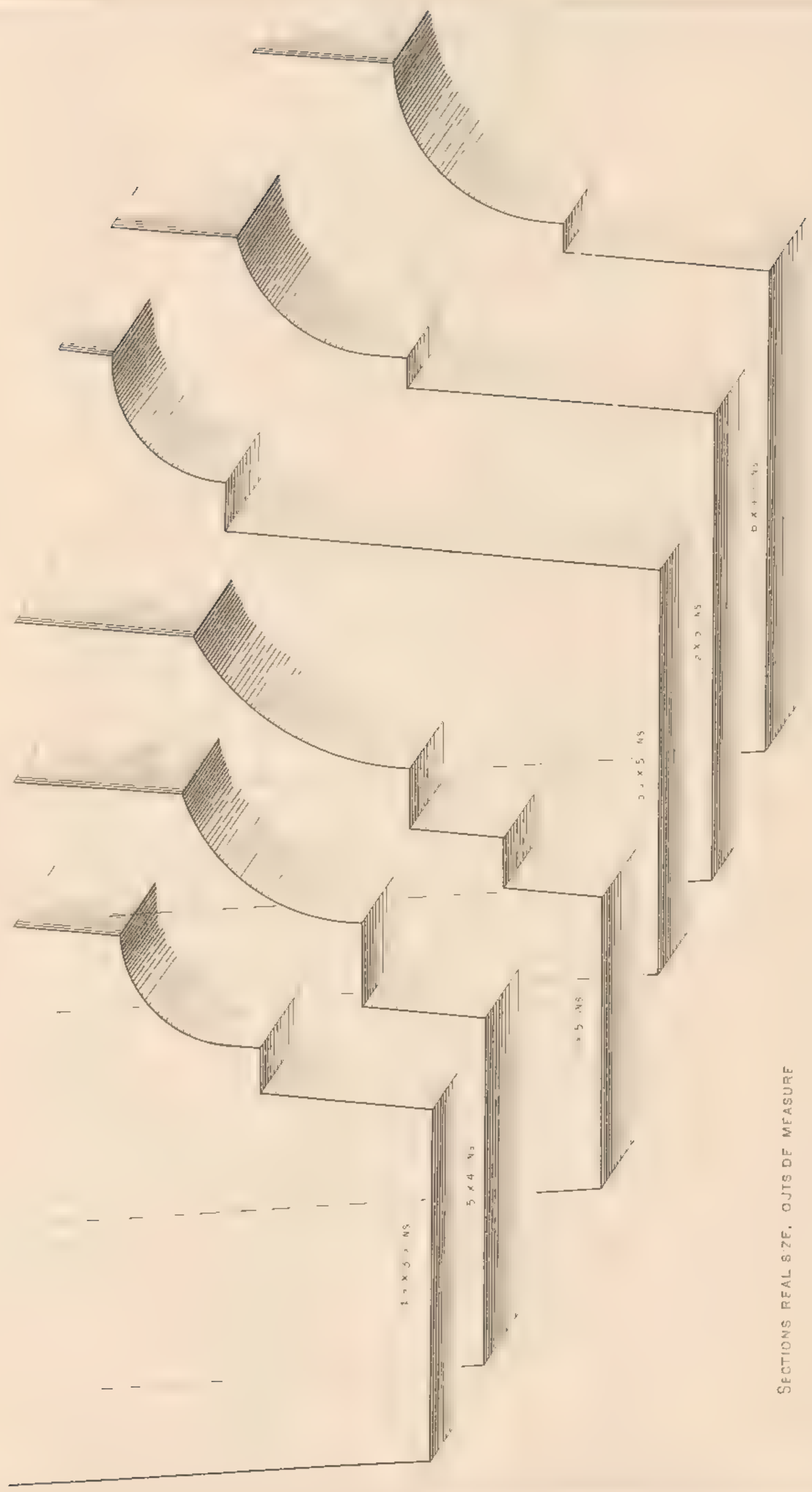


MACFARLANE'S PATENT NO 14 ORNAMENTAL GUTTERS



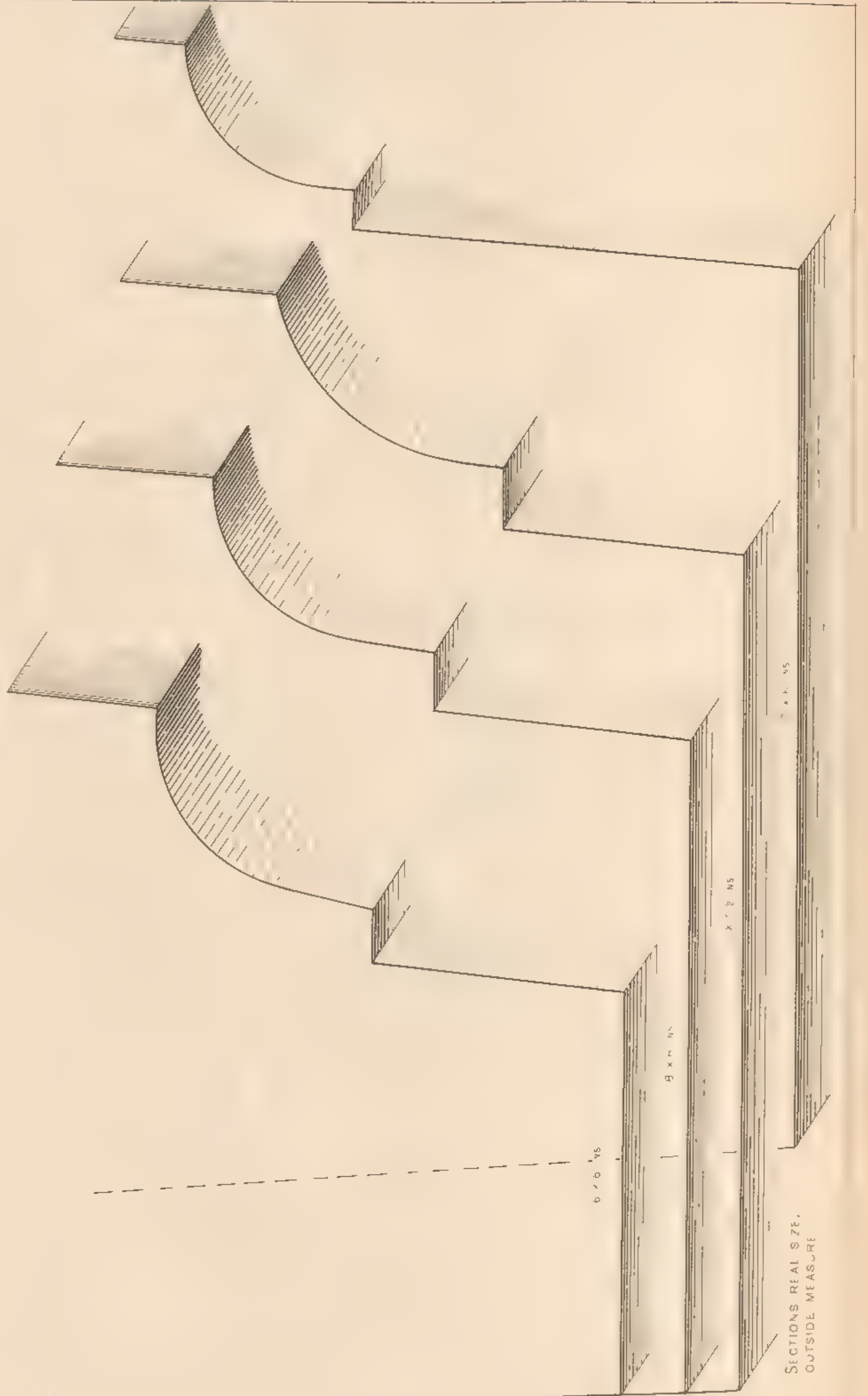
T O S I F A SIZE. OUTSIDE MEASURE

MACFARLANES PATENT NO 16 ORNAMENTAL GUTTERS

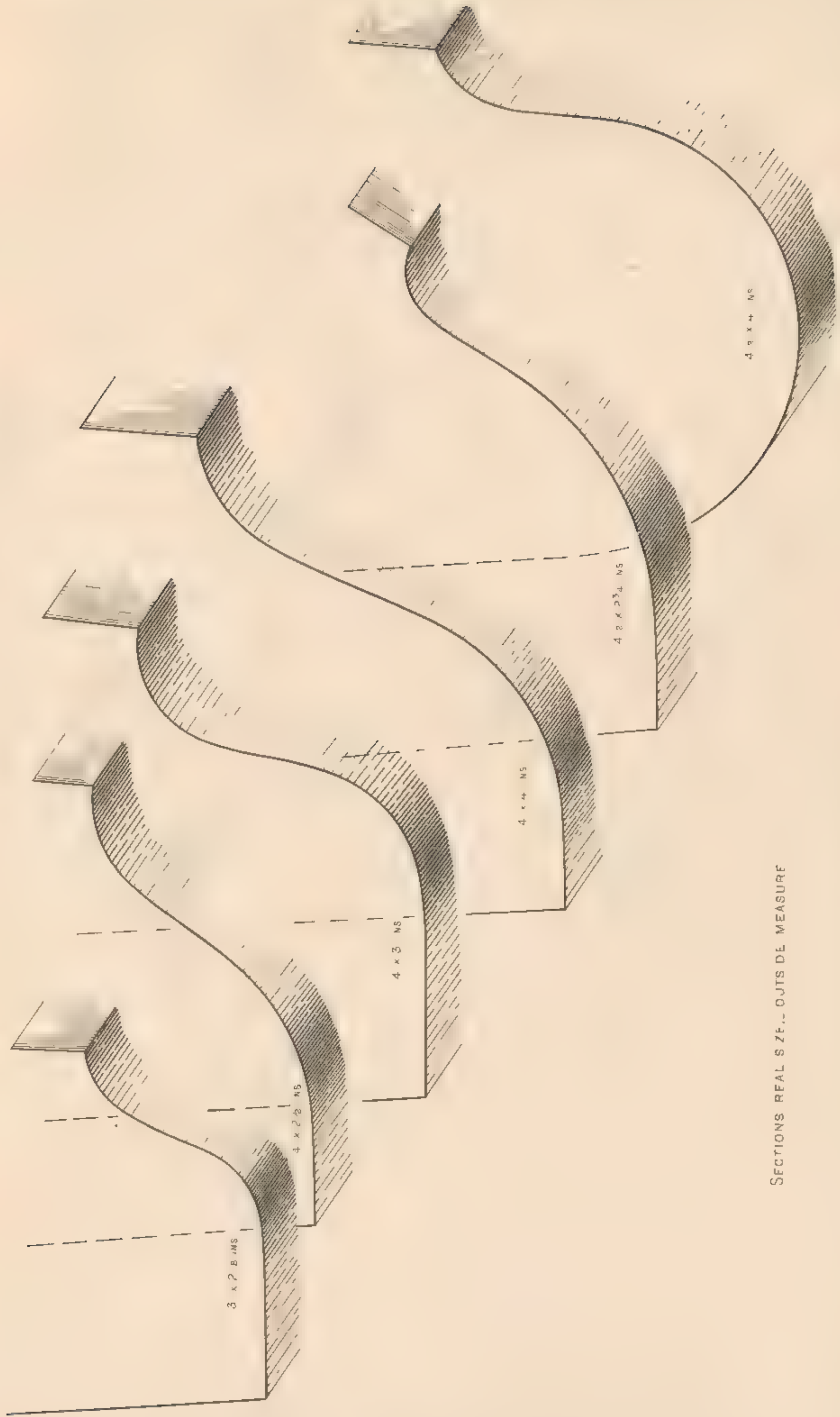


SECTIONS REAL SIZE. OUTS OF MEASURE

MACFARLANE'S PATENT NO 16 ORNAMENTAL GUTTERS.

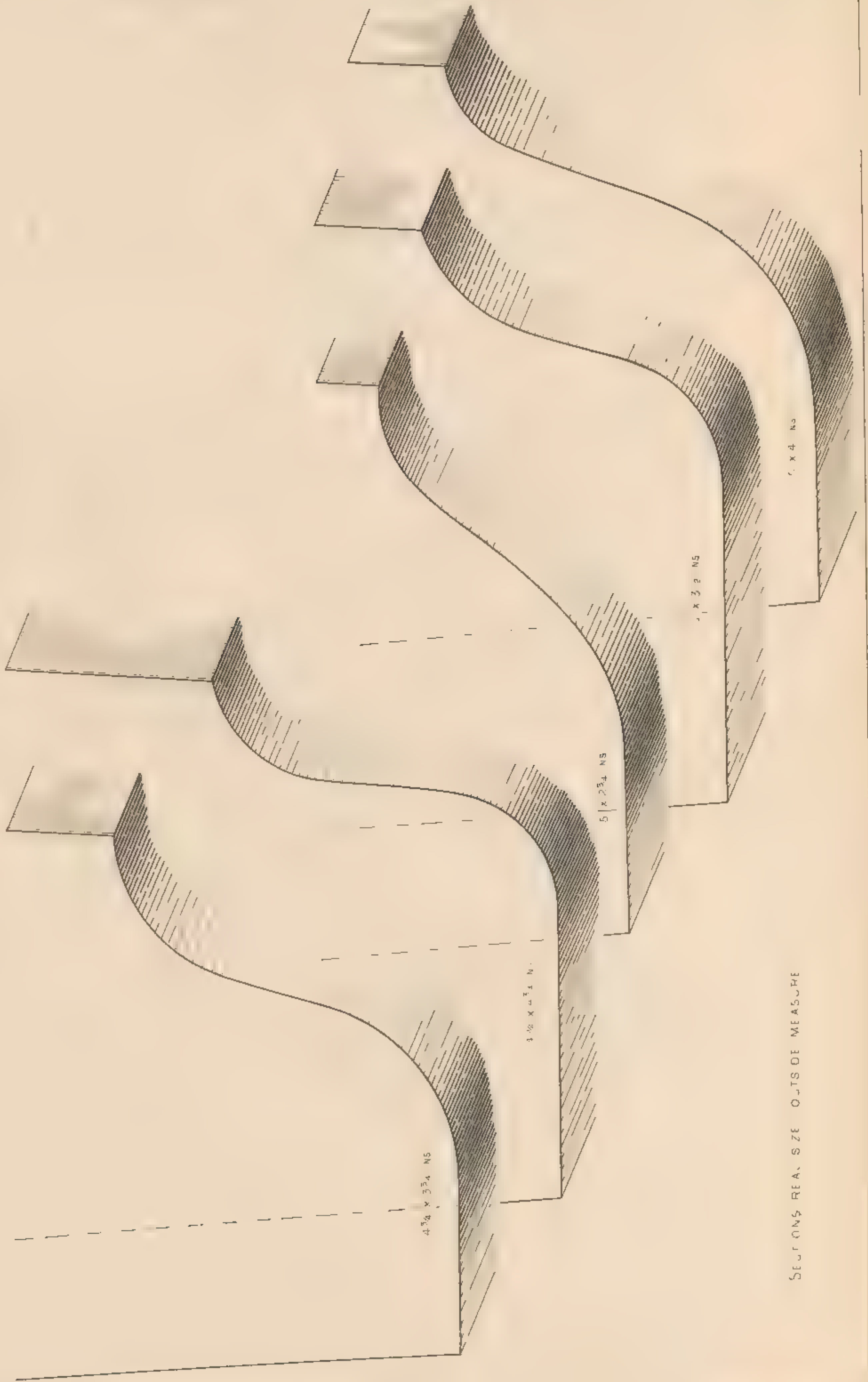


MACFARLANE'S PATENT N°23 ORNAMENTAL GUTTERS



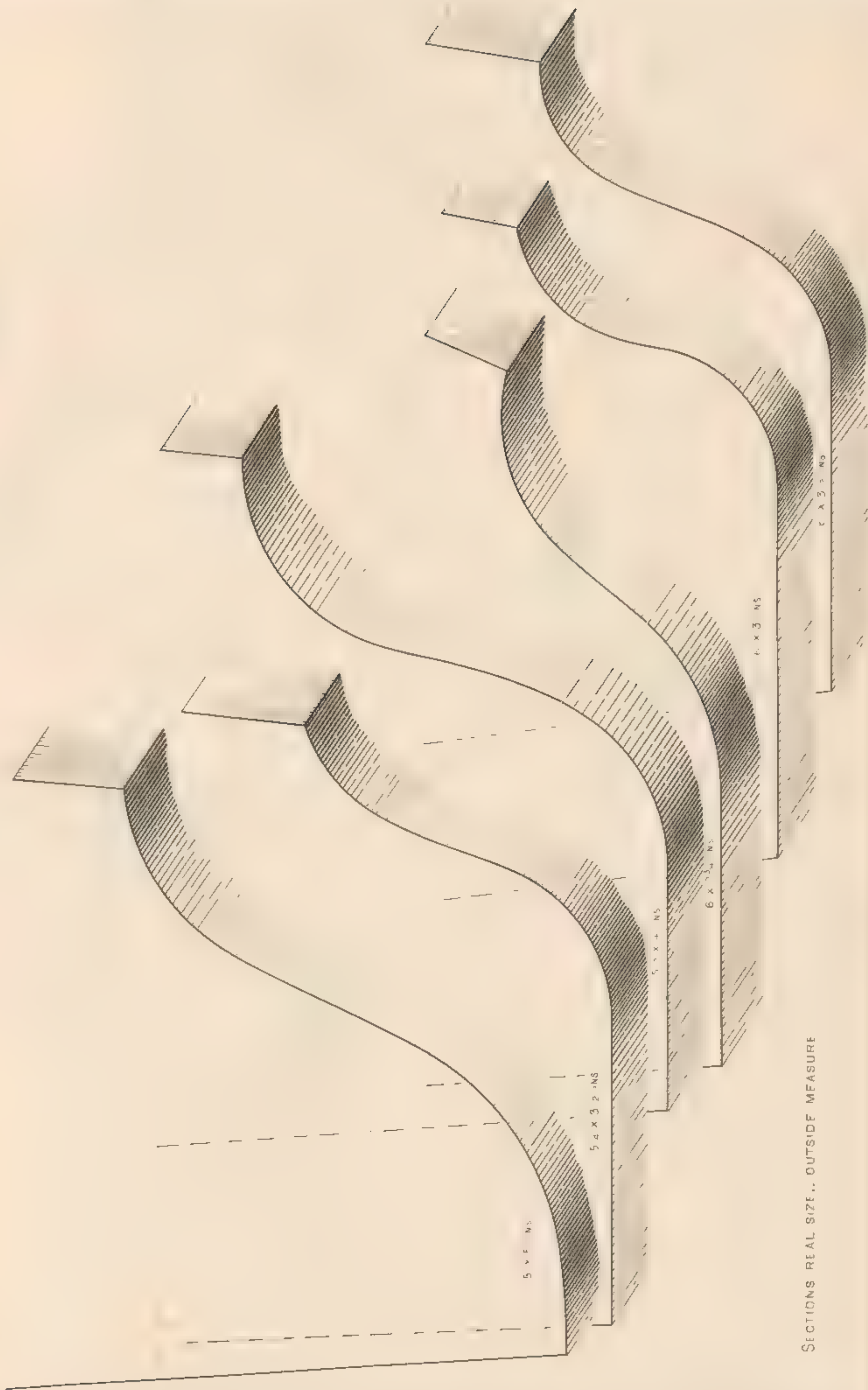
SECTIONS REALS DE L'OBJET DE MESURE

MA FARLAN'S PATENT 15 23064AM: N. A. GUTTERS

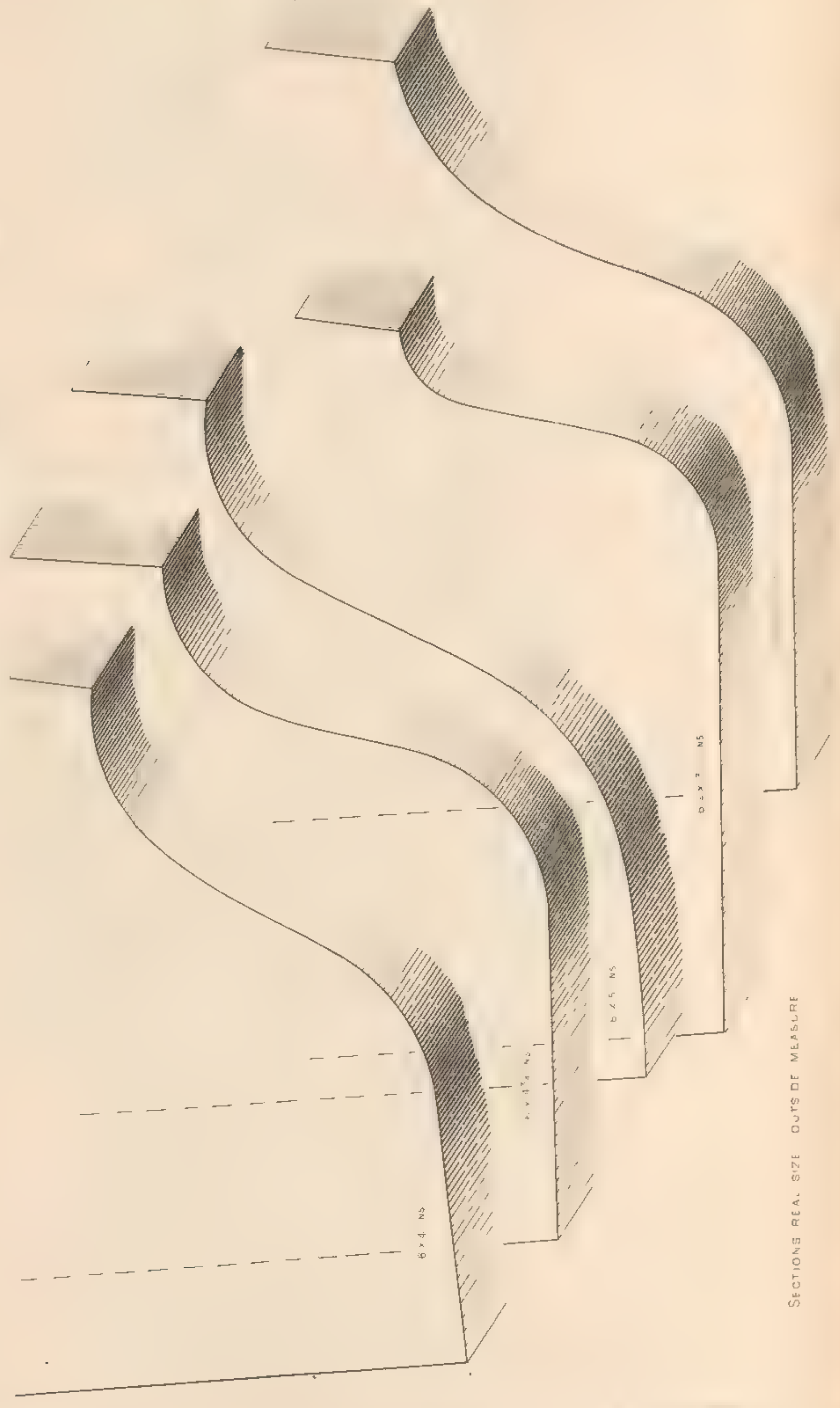


SECTION'S REAL SIZE OUTSIDE MEASURE

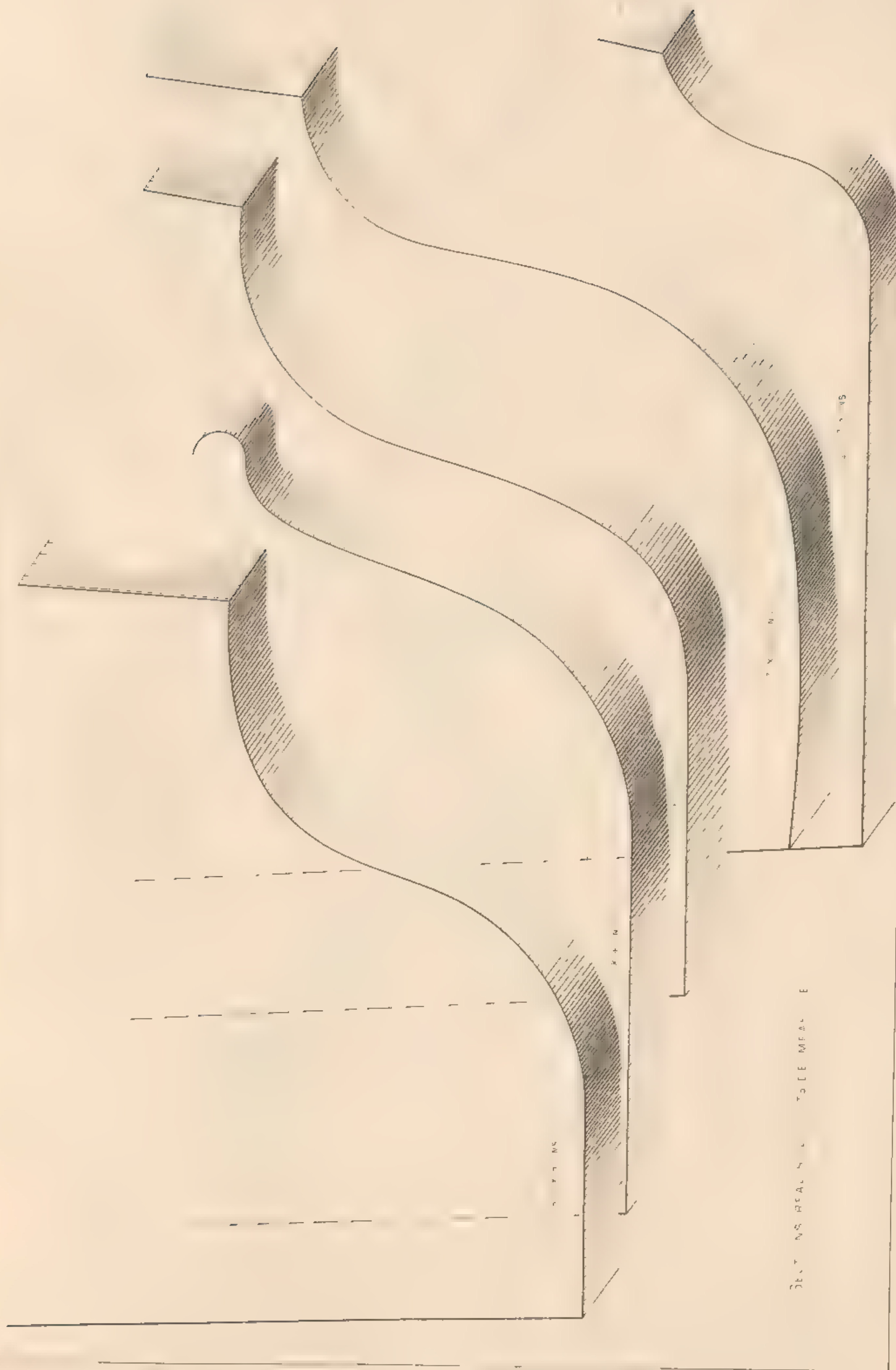
MACFARLANE'S PATENT NO 23 ORNAMENTAL GUTTERS



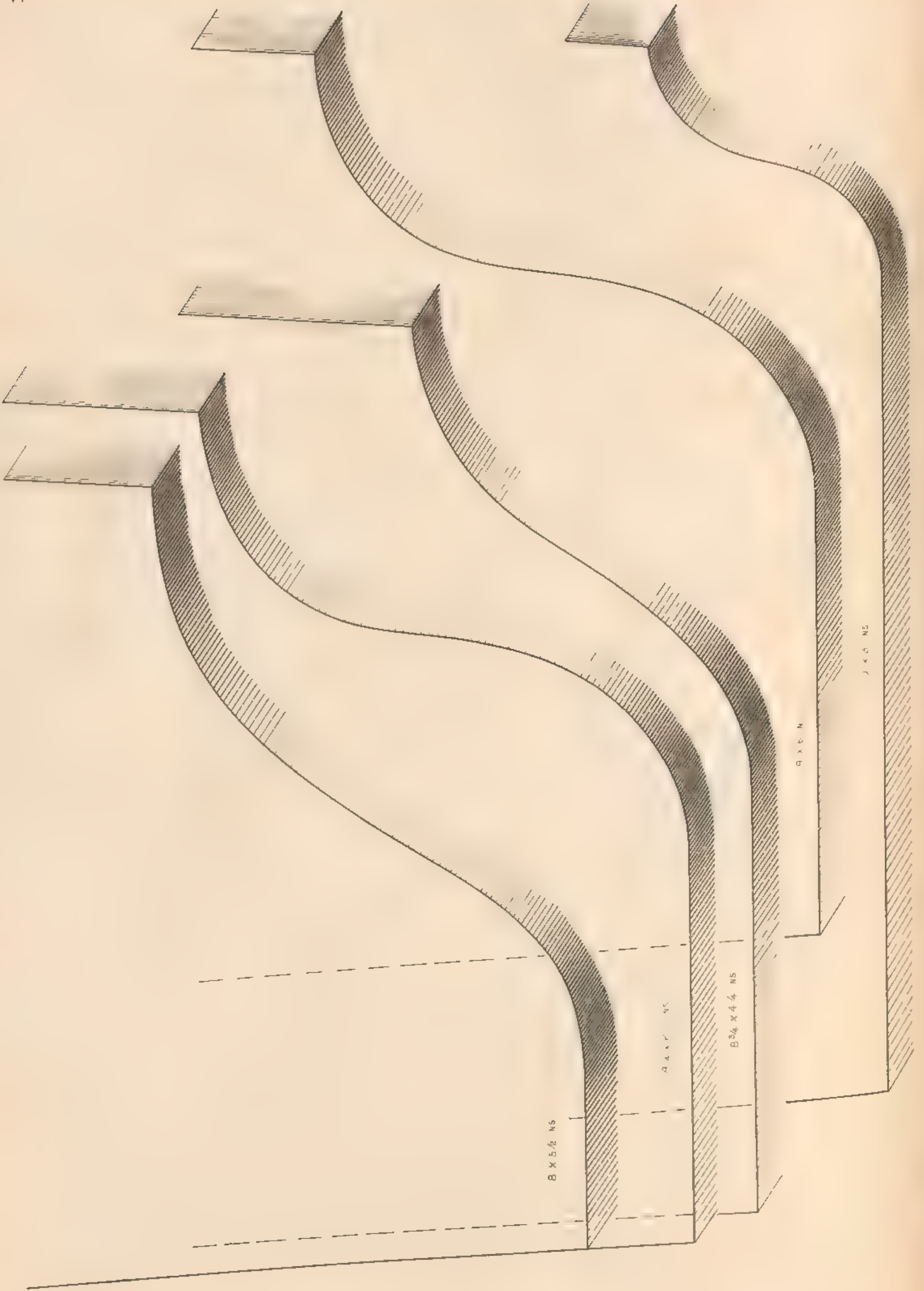
MACFARLANE'S PATENT N° 23 ORNAMENTAL GUTTERS

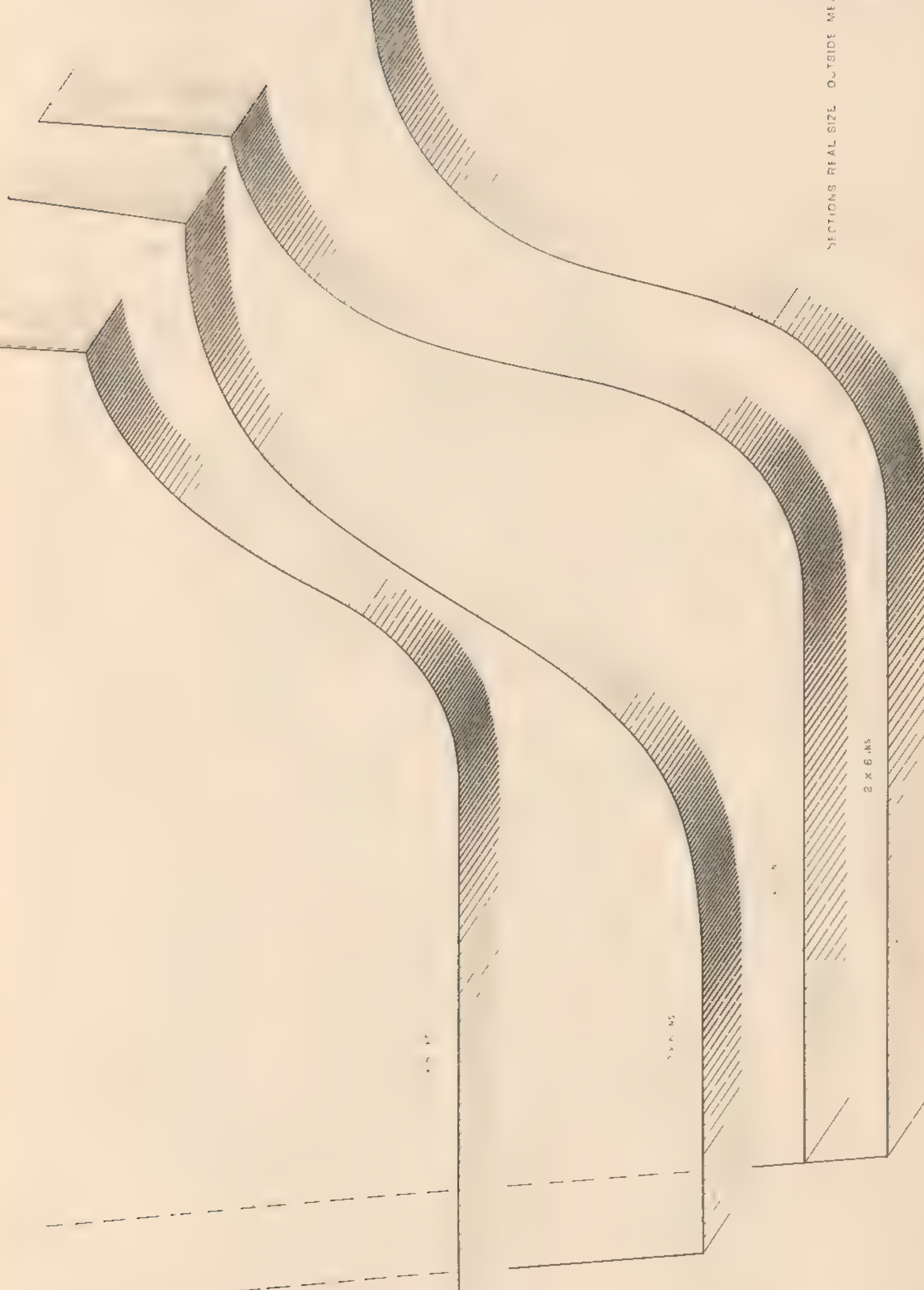


SECTIONS REAL SIZE OUTSIDE MEASURE



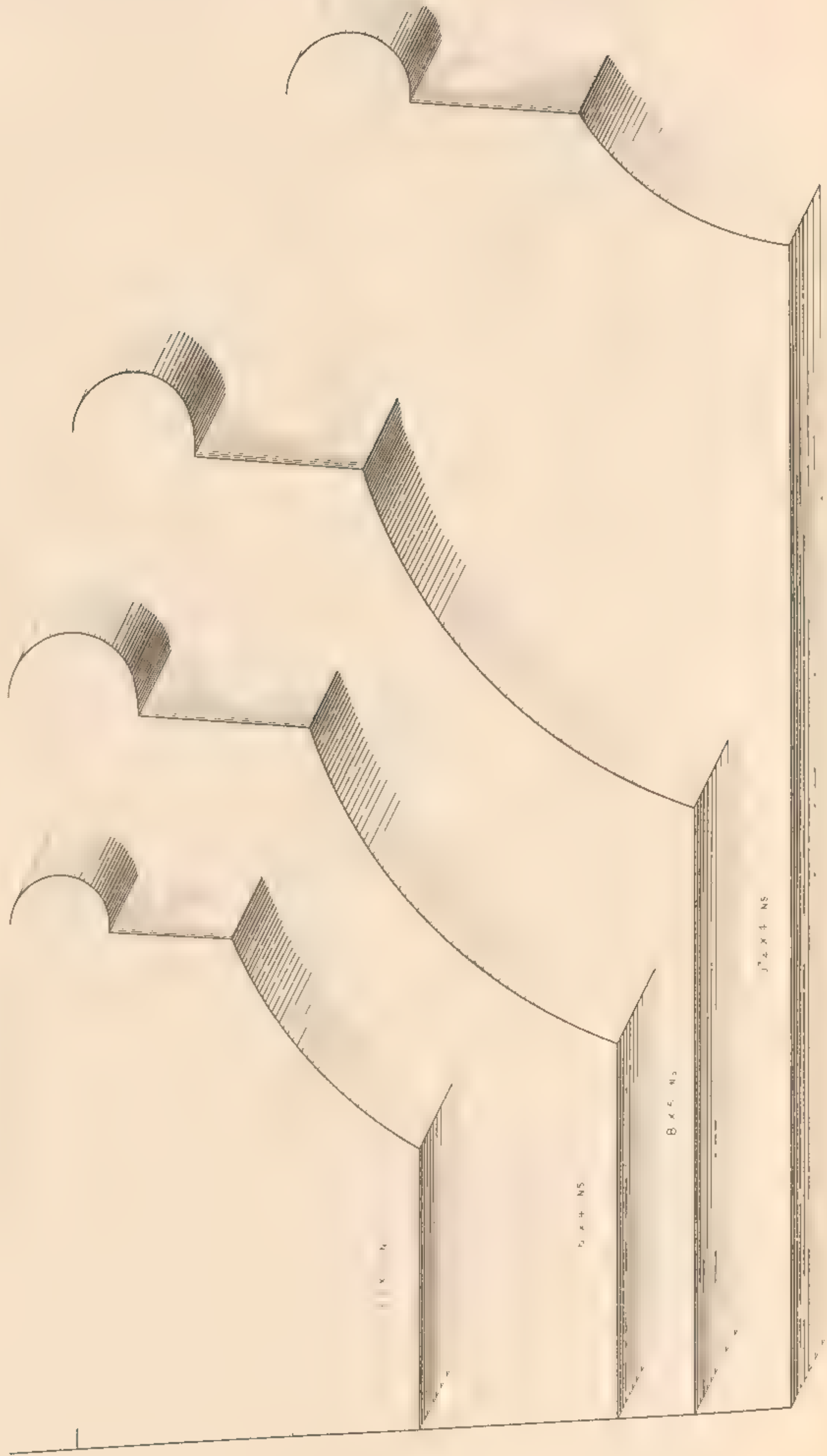
MACFARLANE'S PATENT N° 23 ORNAMENTAL GUTTERS





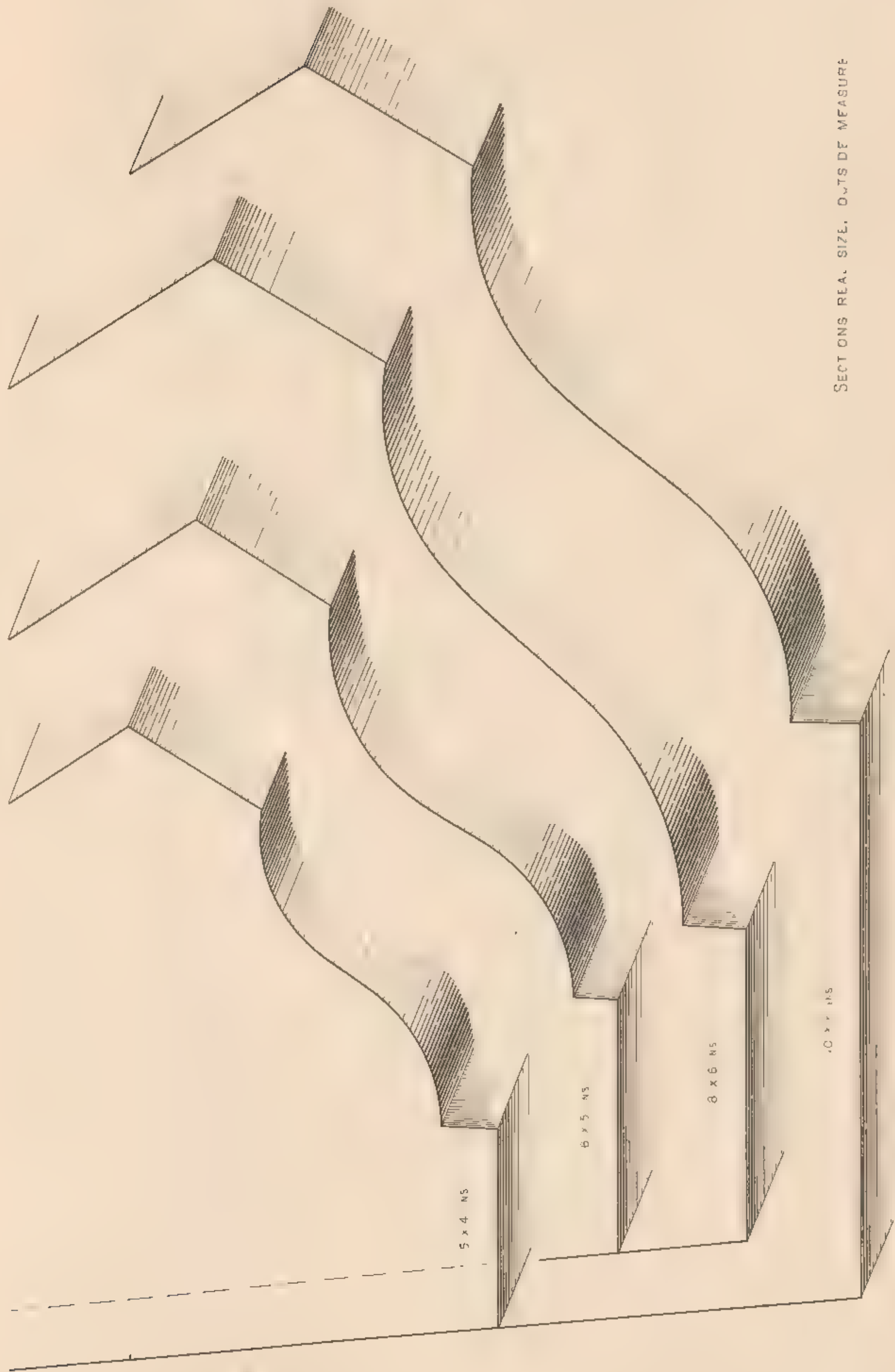
SECTIONS REAL SIZE OUTSIDE MEASURE

MACFARLANE'S PATENT NO 33 ORNAMENTAL GUTTERS



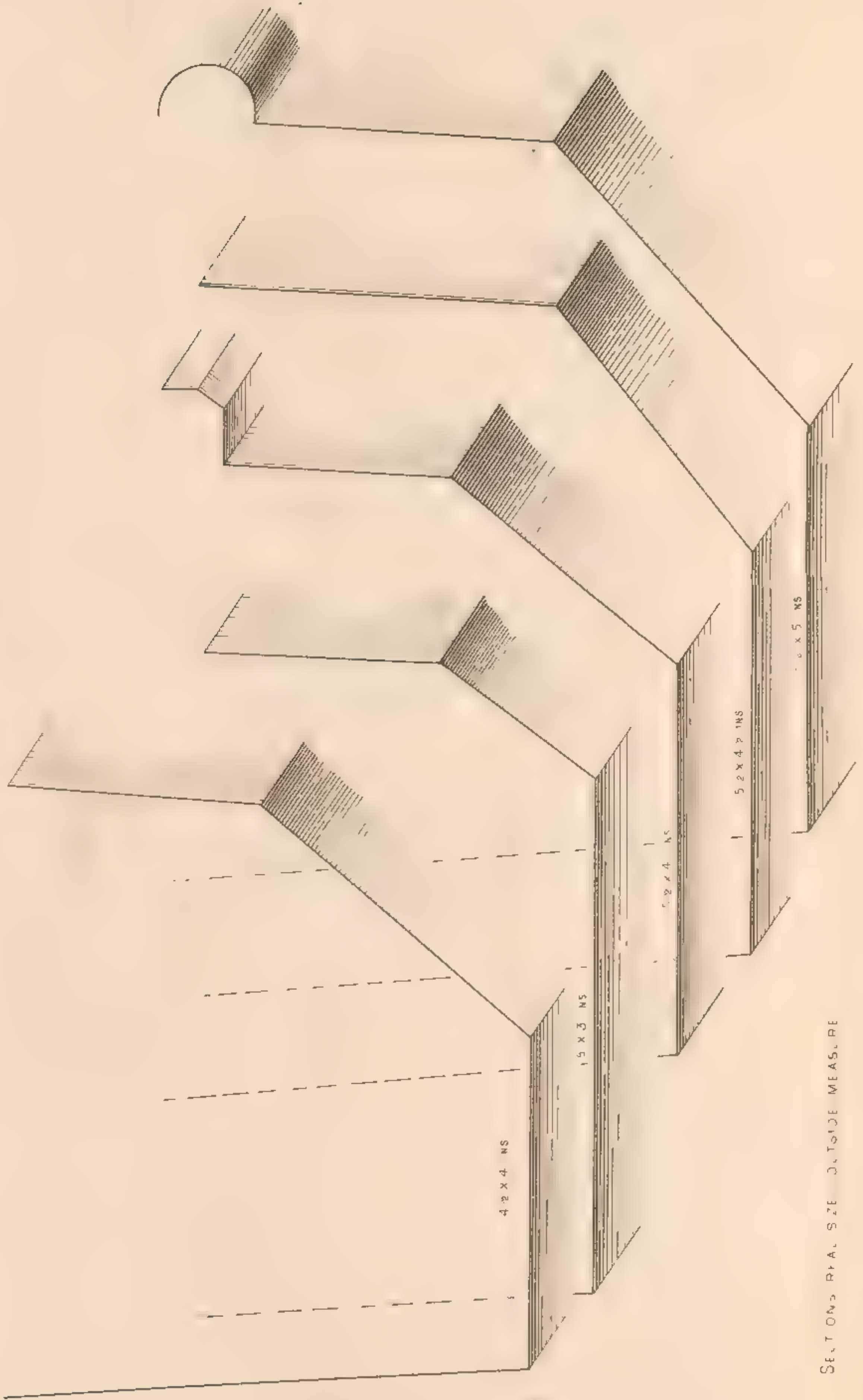
SECTIONS REAL SIZE OUTSIDE MEASURE

MACFARLANE'S PATENT NO 37 ORNAMENTAL GUTTERS.



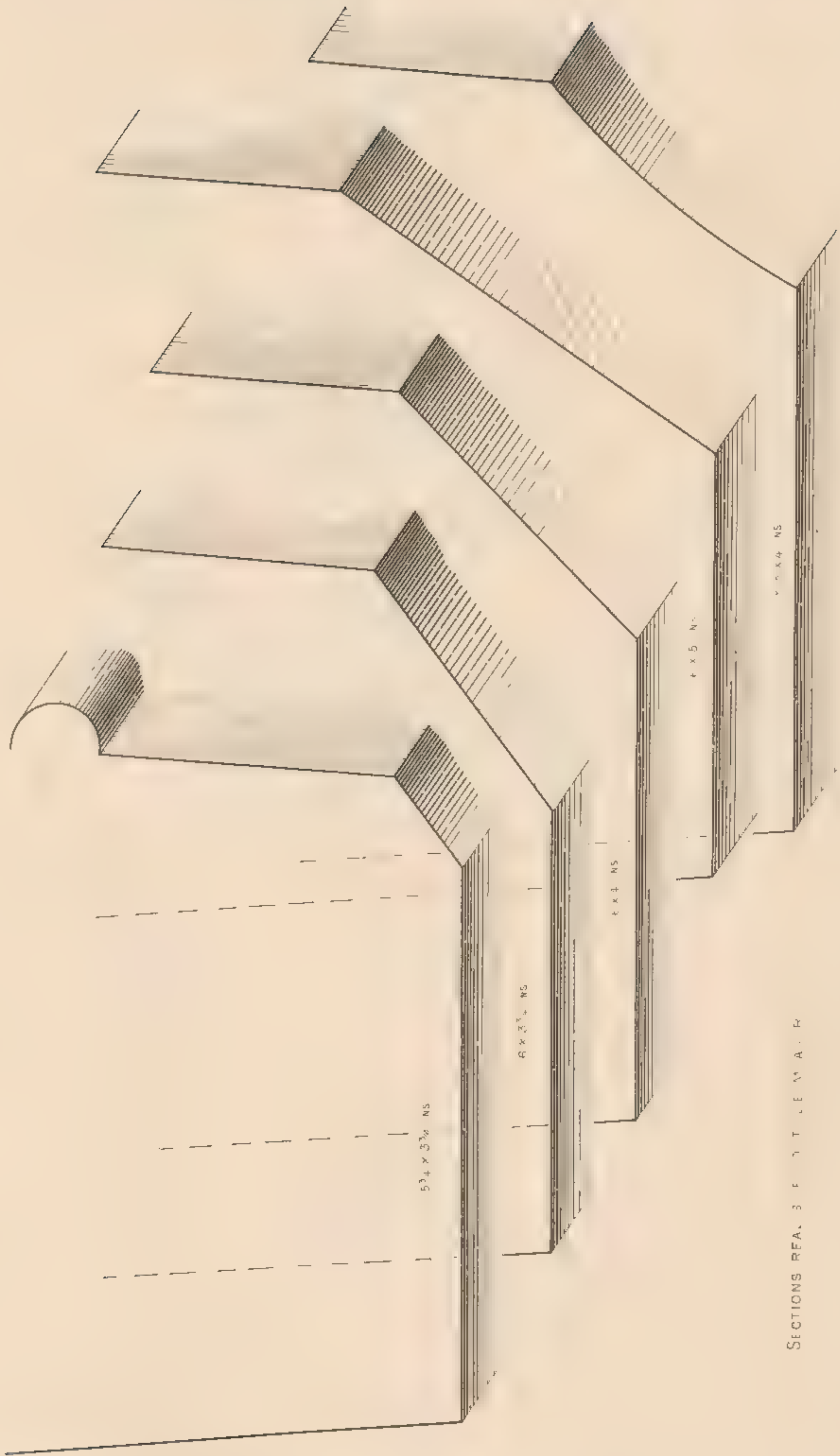
SECTIONS REAL SIZE. DOTS DE MEASURE

MACFARLANE'S PATENT NO 38 ORNAMENTAL GUTTERS



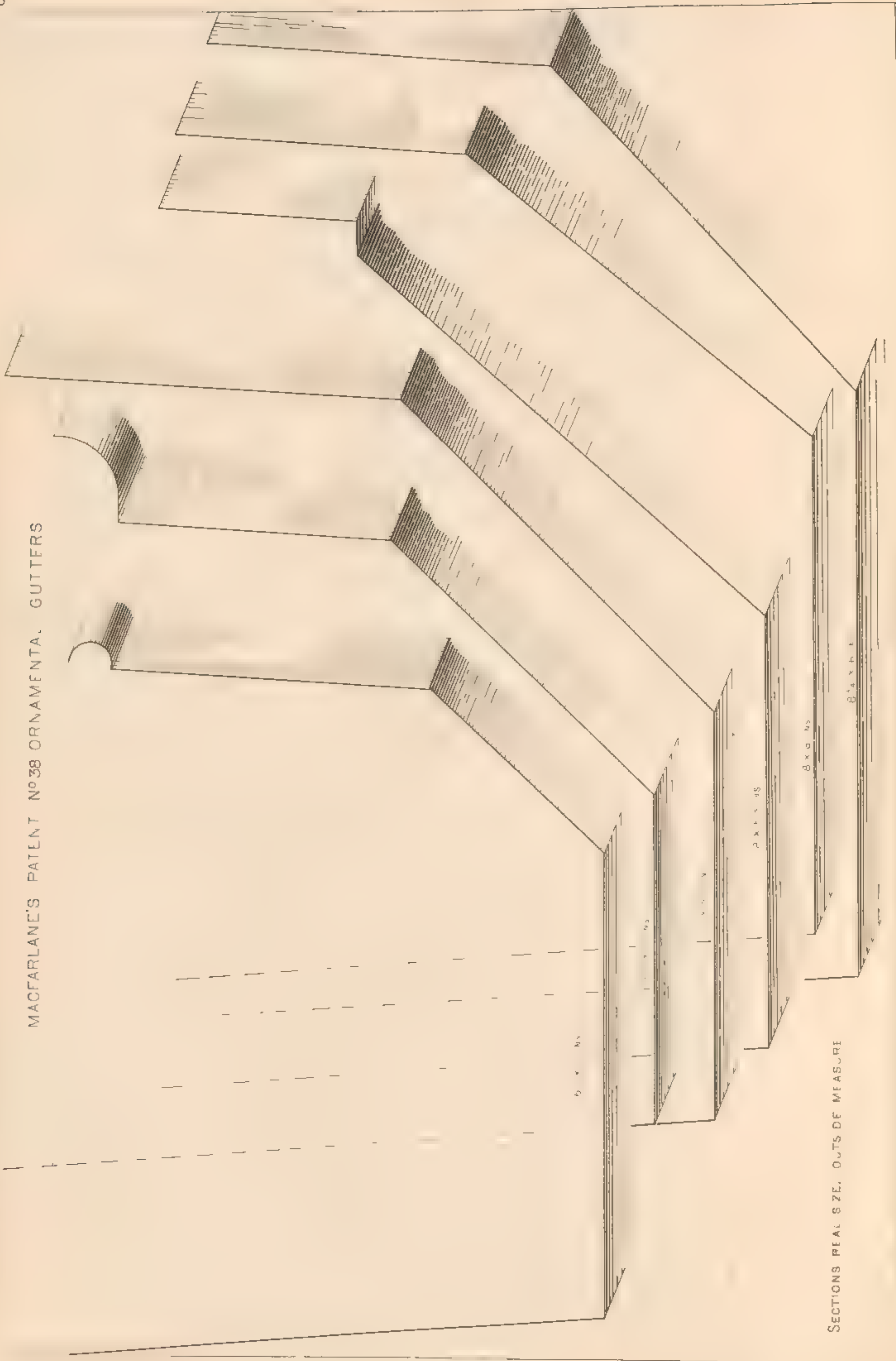
SECTIONS R & A. SIZE 3/16" DEEP MEASURE

MACFARLANE'S PATENT NO 38 ORNAMENTAL GUTTERS



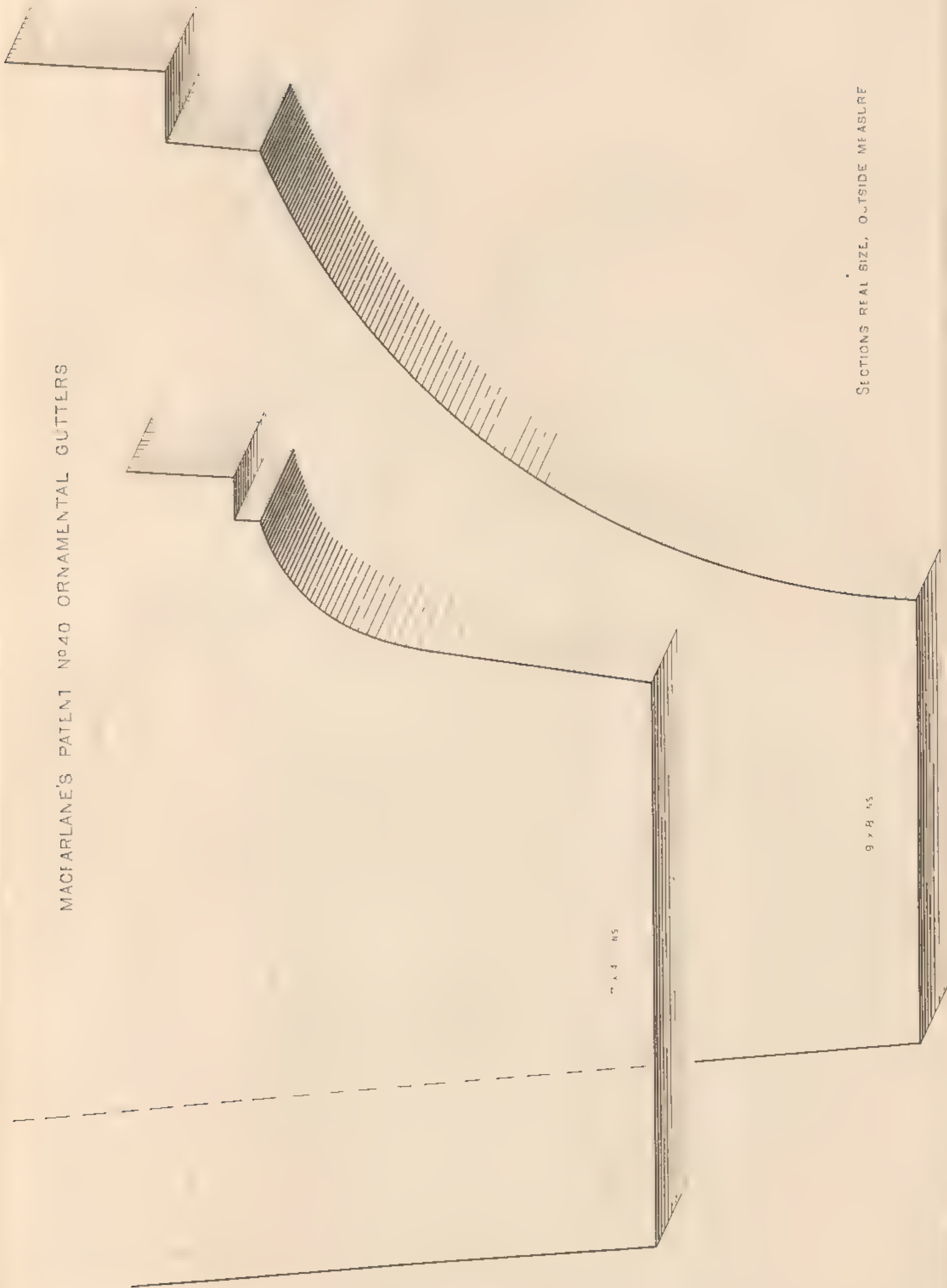
SECTIONS REF. 3 E T L E M A. R

MACFARLANE'S PATENT NO 38 ORNAMENTAL GUTTERS



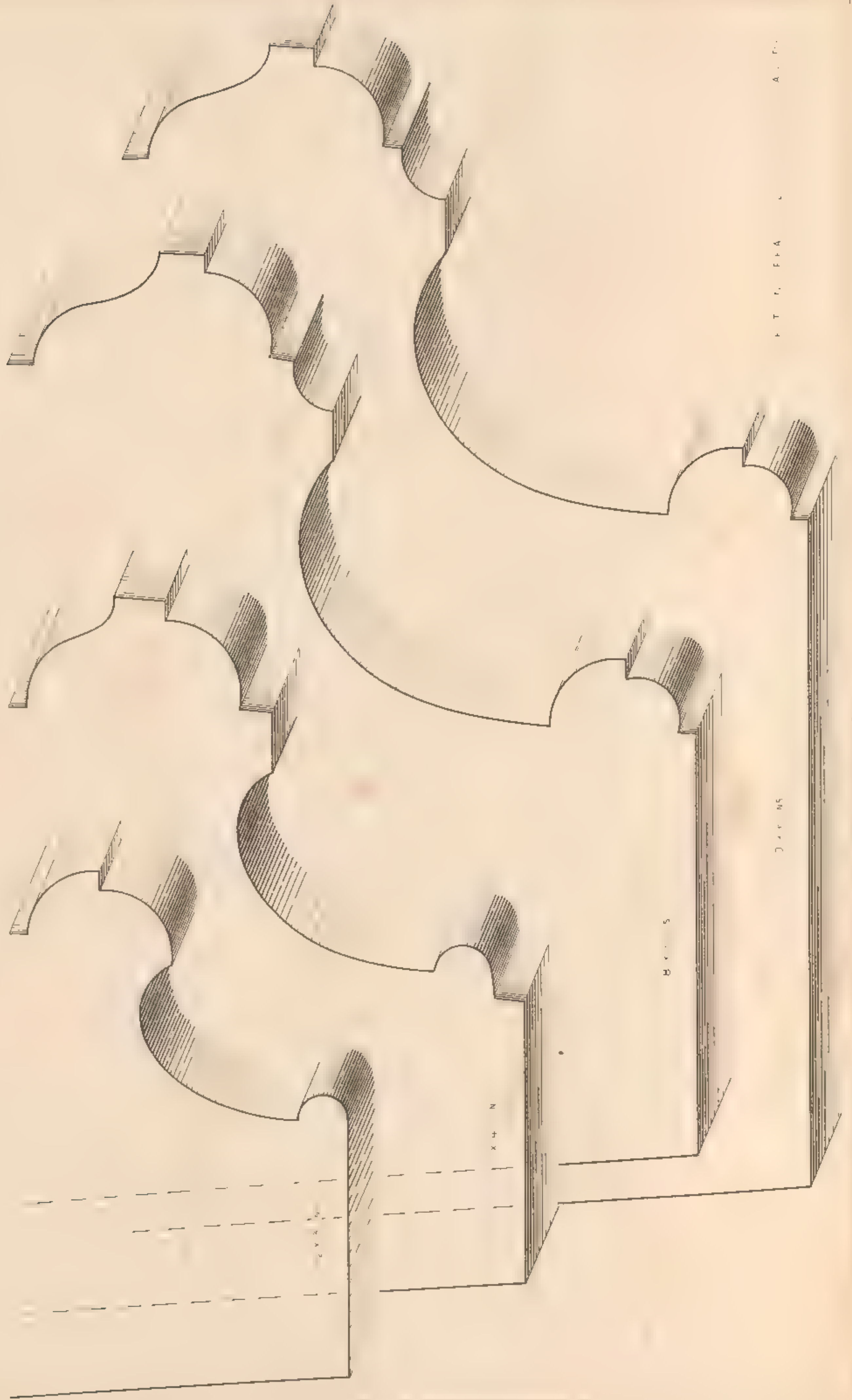
SECTIONS REAL SIZE, OUTS OF MEASURE

MACFARLANE'S PATENT No 40 ORNAMENTAL GUTTERS



SECTIONS REAL SIZE, OUTSIDE MEASURE

MACFARLANE'S PATENT NO 42 ORNAMENTAL GUTTERS •



A. P.

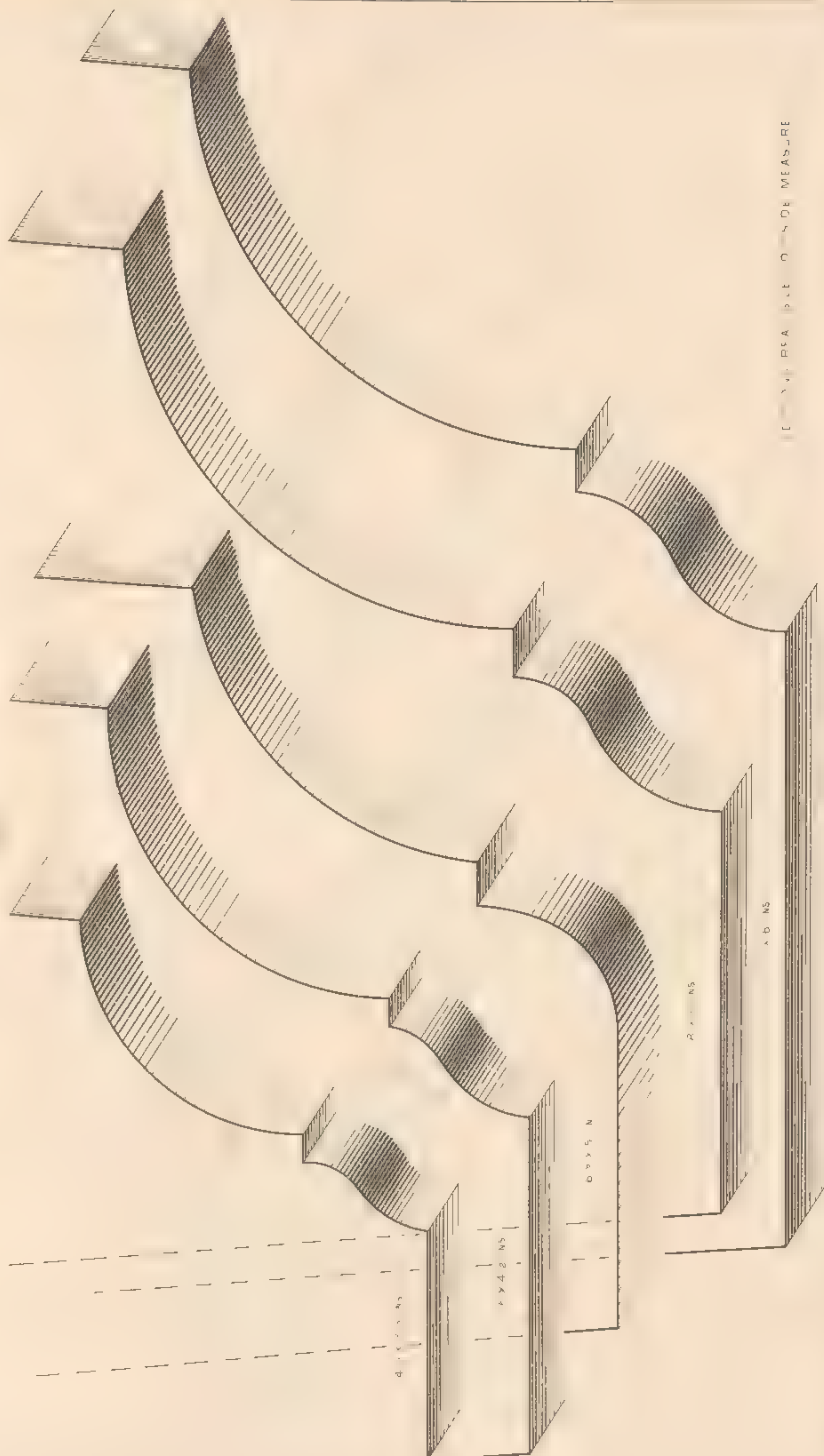
T. F. A.

J. & S.

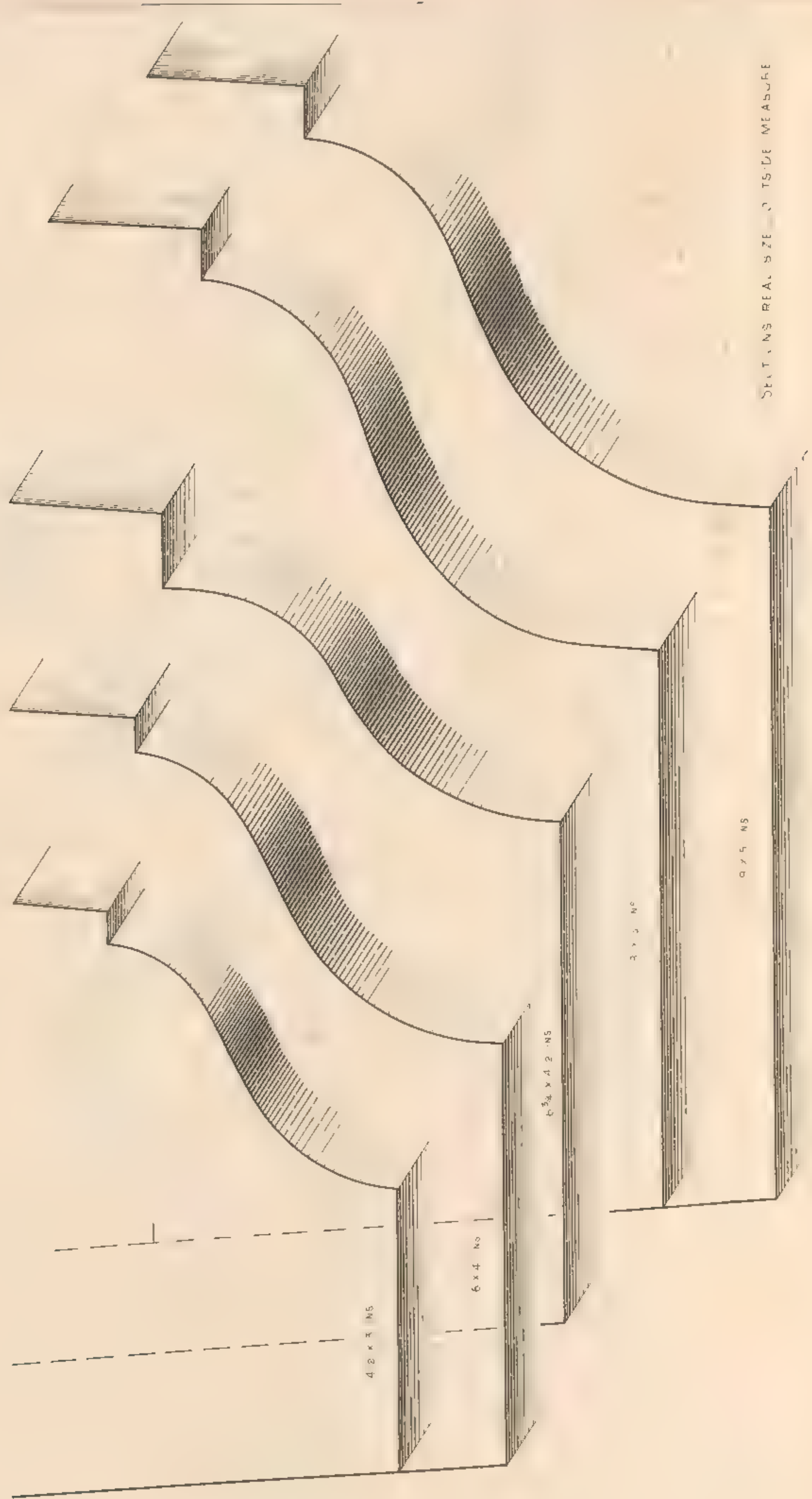
D. & S.

N. J. X.

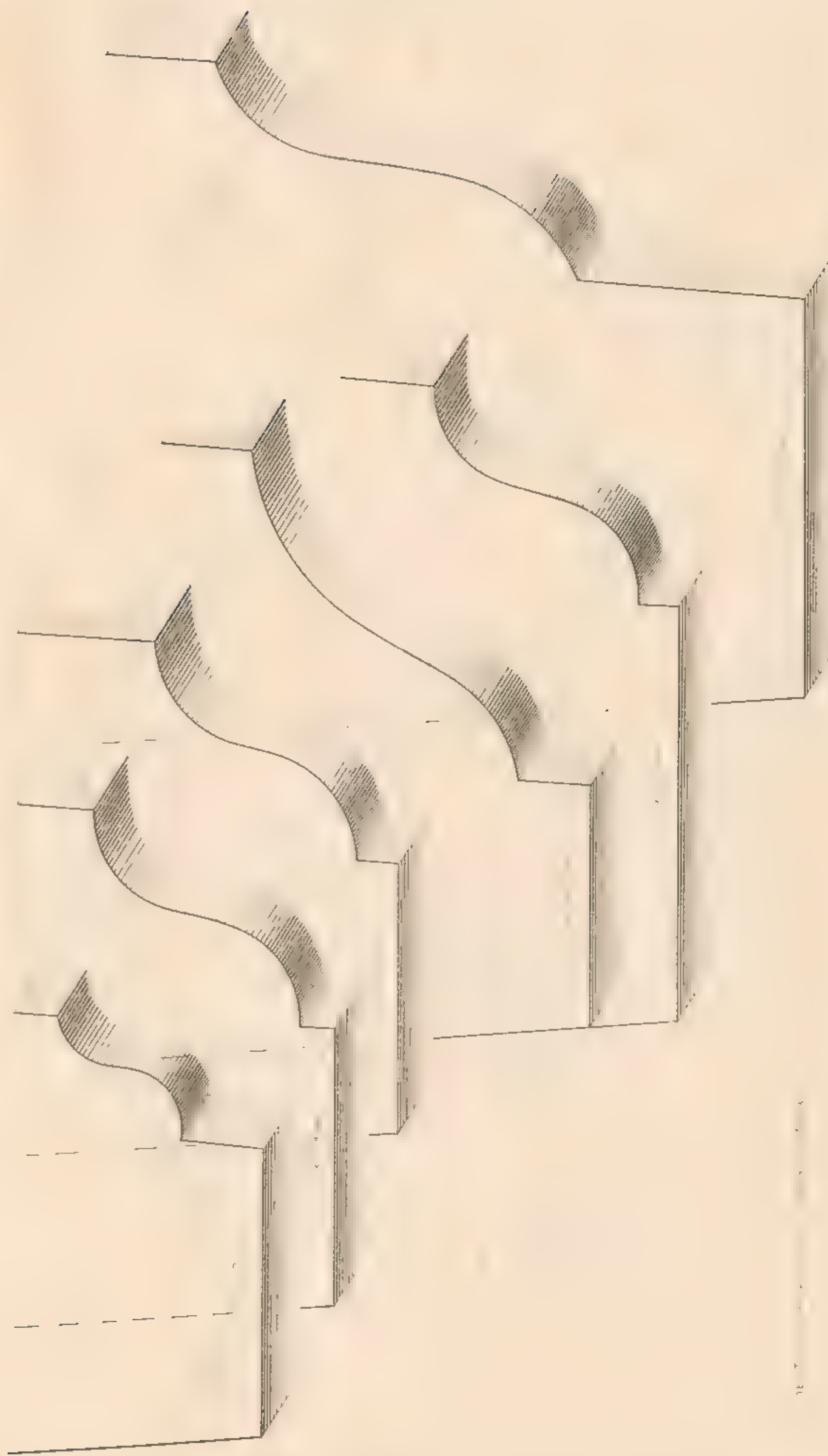
MACFARLANE'S PATENT NO 44 ORNAMENTAL GLITTERS.



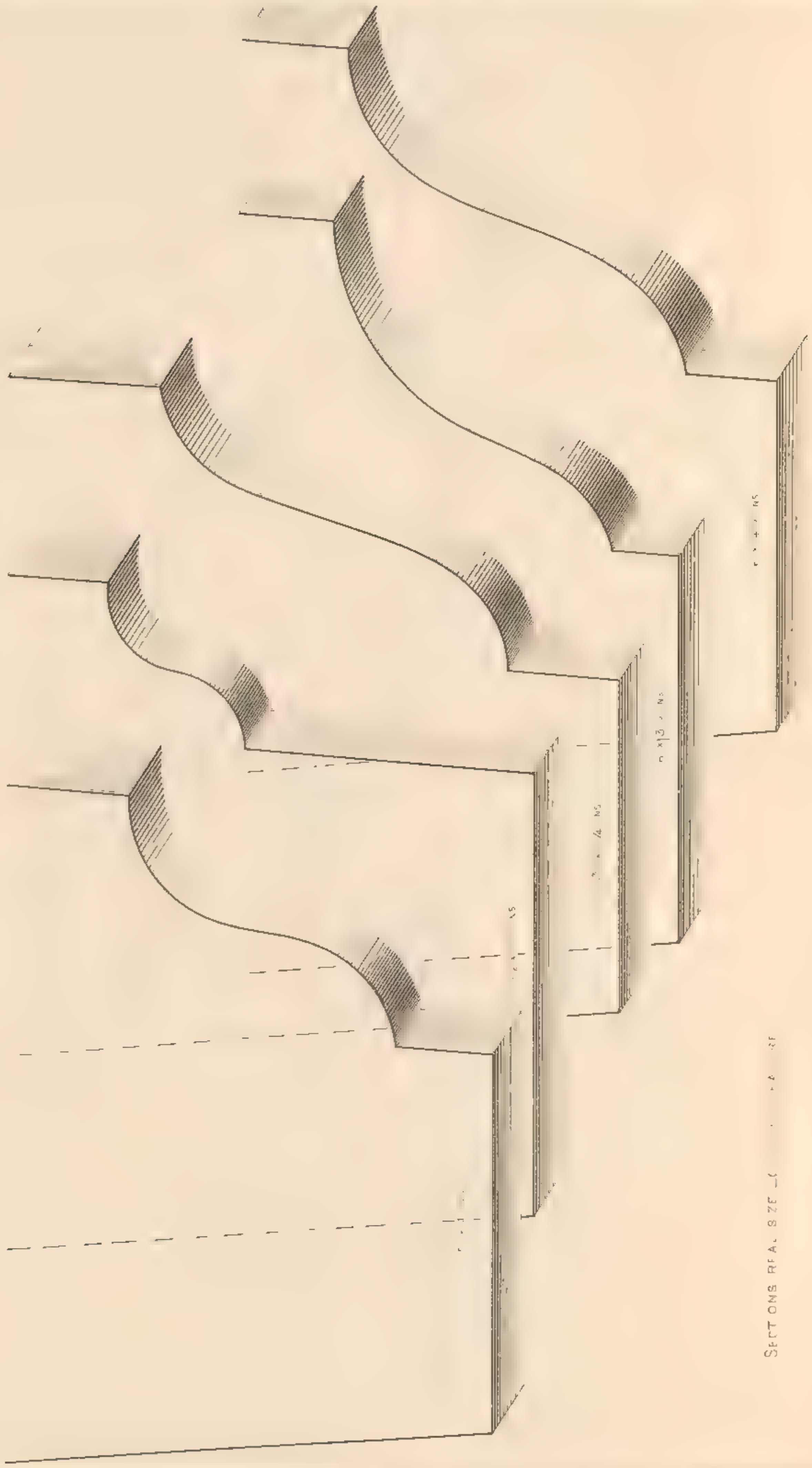
MACFARLANE'S PATENT No 45 ORNAMENTAL GUTTERS



MACFARLANE'S PATENT NO 46 ORNAMENTAL GUTTERS

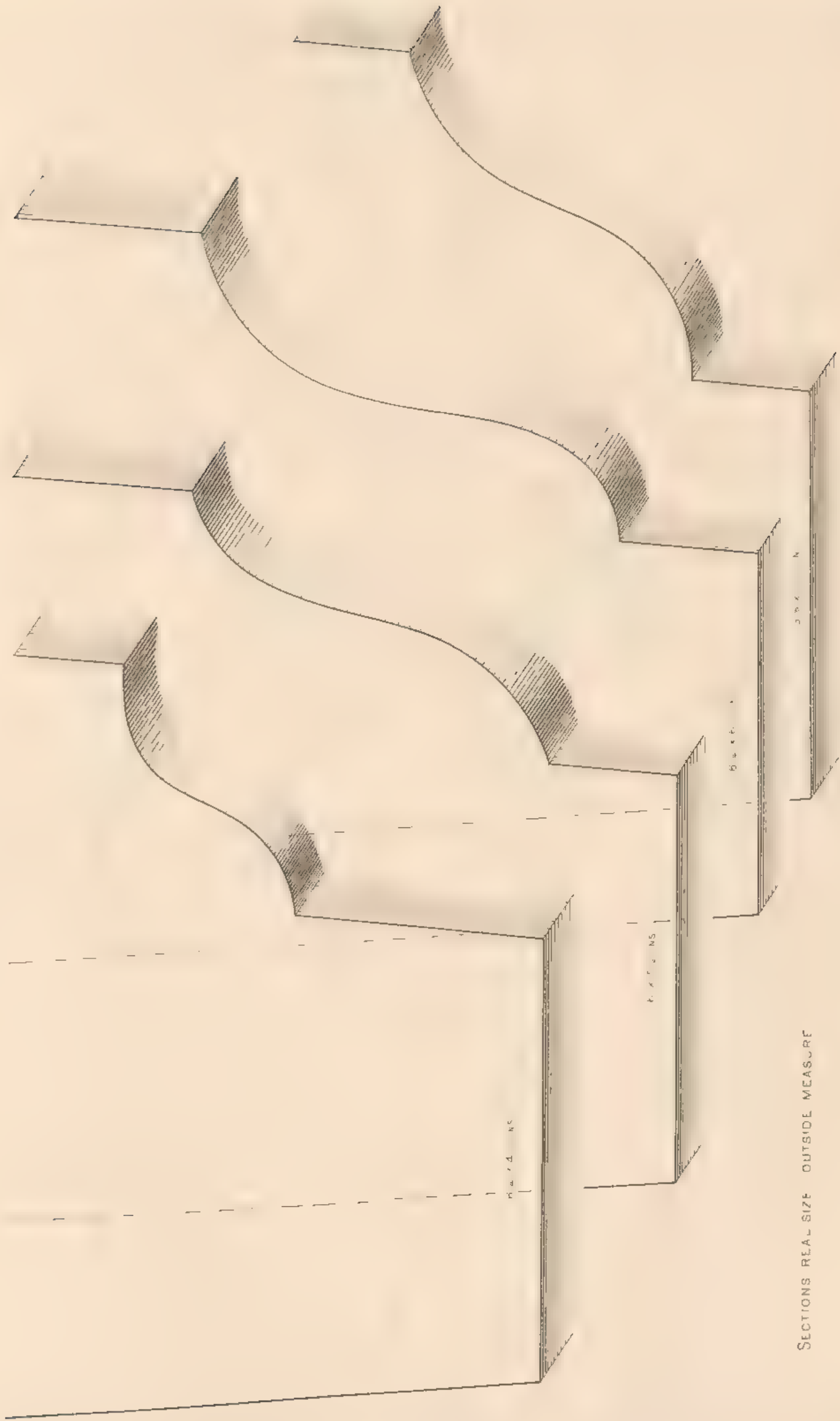


MA. FAR. 47. N. PATENT 3346 ORNAMENTS 3 TIEHS



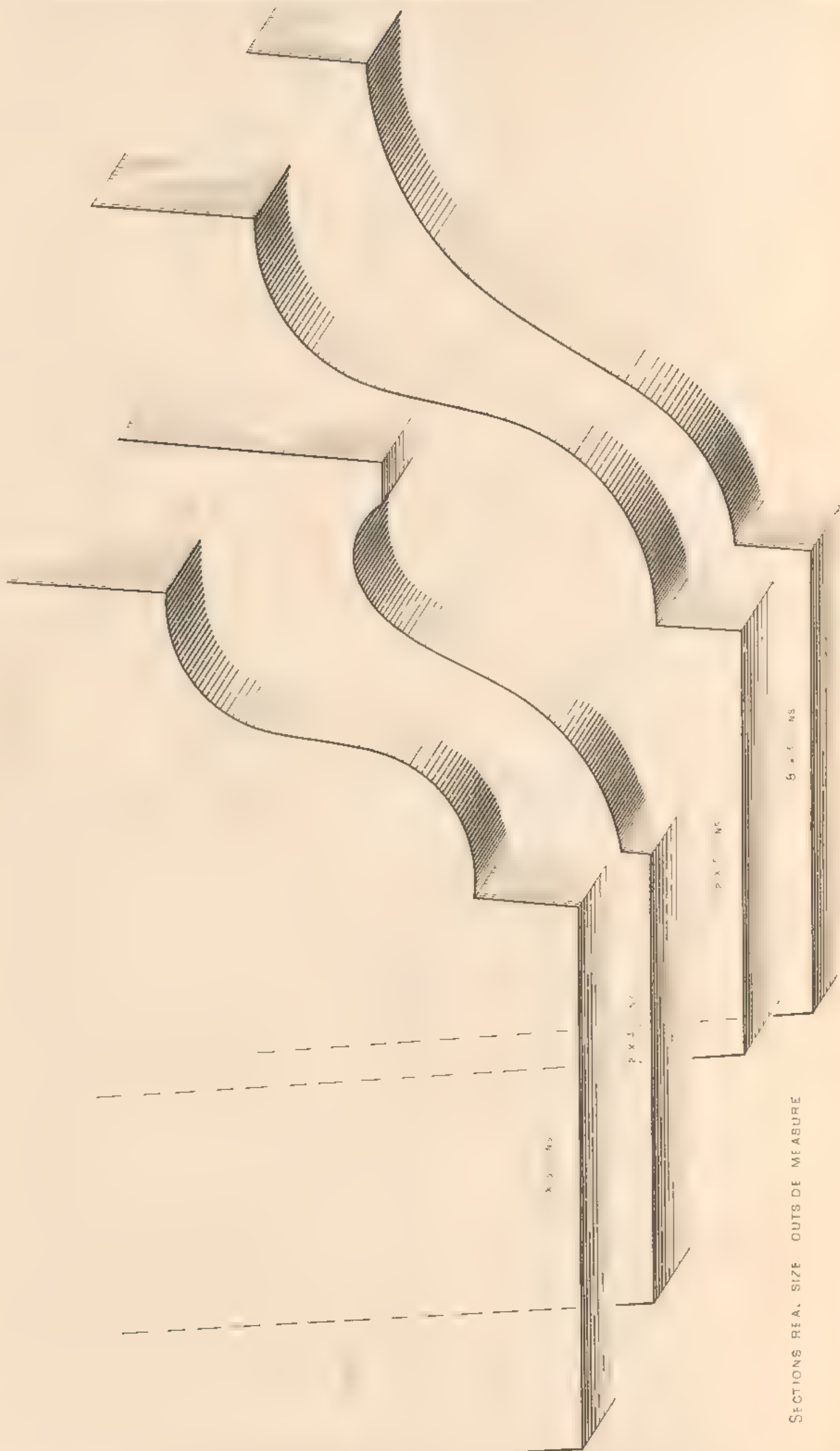
SECTIONS REAL SIZE

MACFARLANE'S PATENT NO 46 ORNAMENTAL GUTTERS



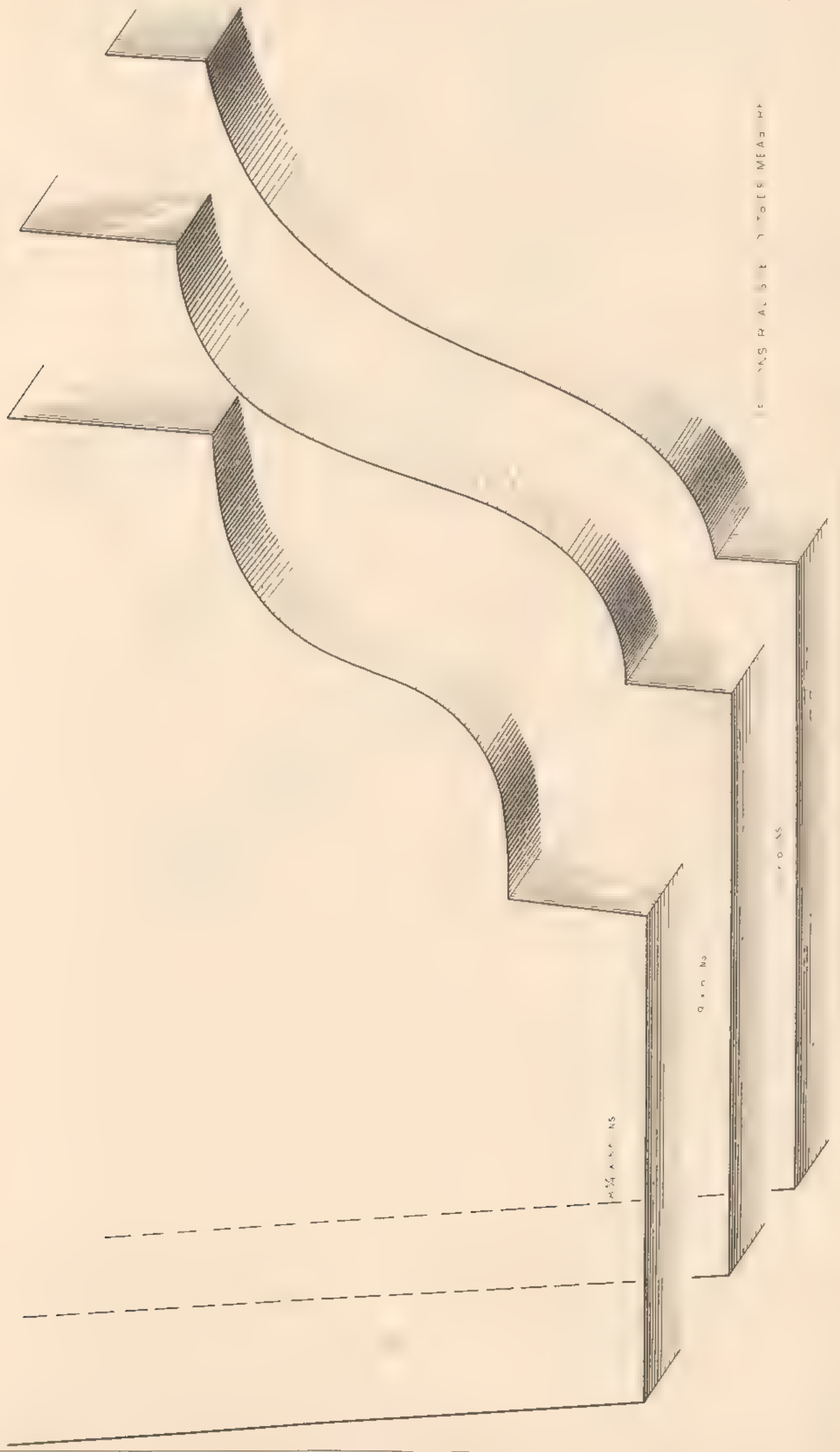
SECTIONS REAL SIZE OUTSIDE MEASURE

MACFARLANE'S PATENT NO 46 ORNAMENTAL GUTTERS

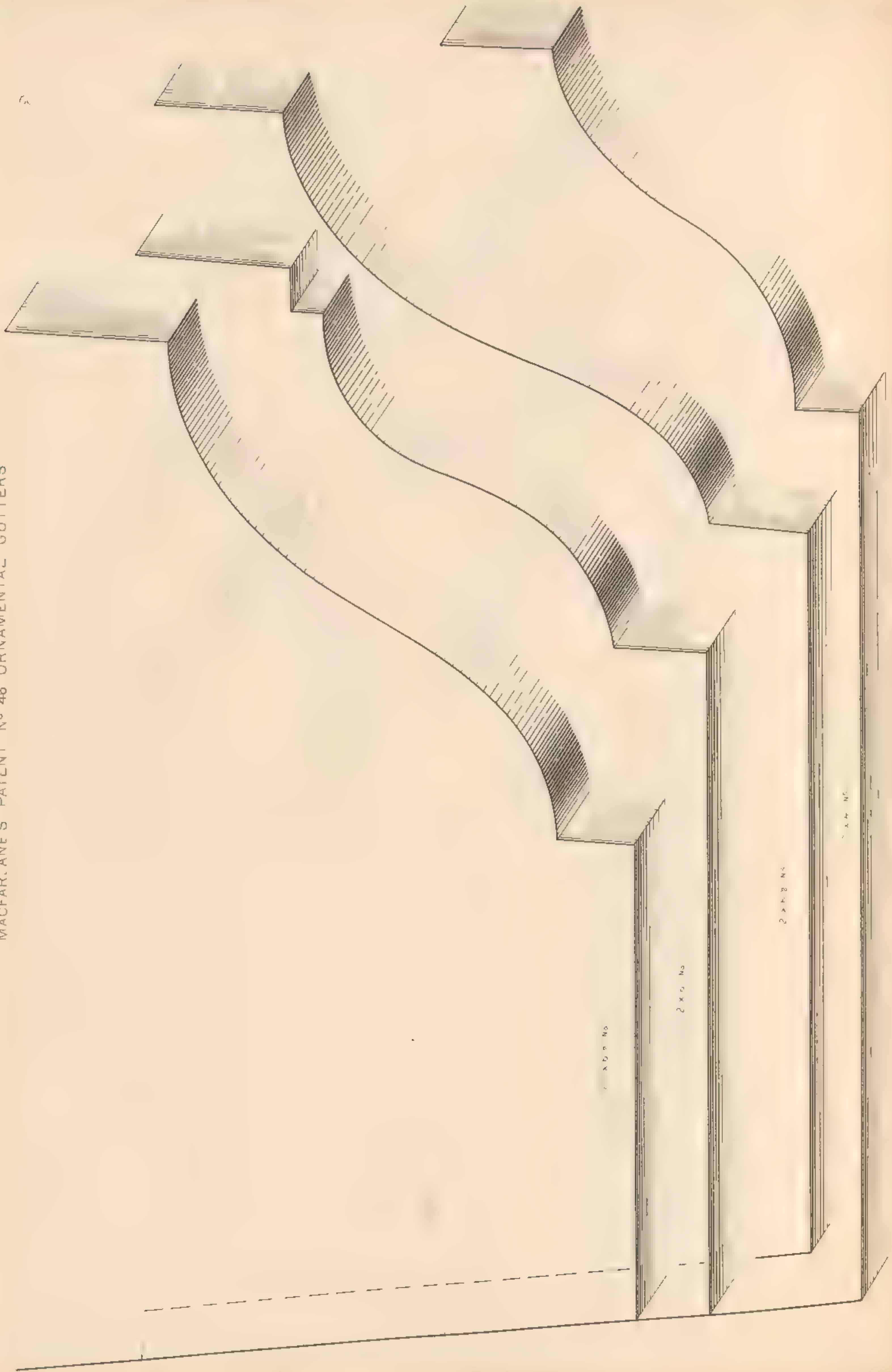


SECTIONS REA. SIZE OUTSIDE MEASURE

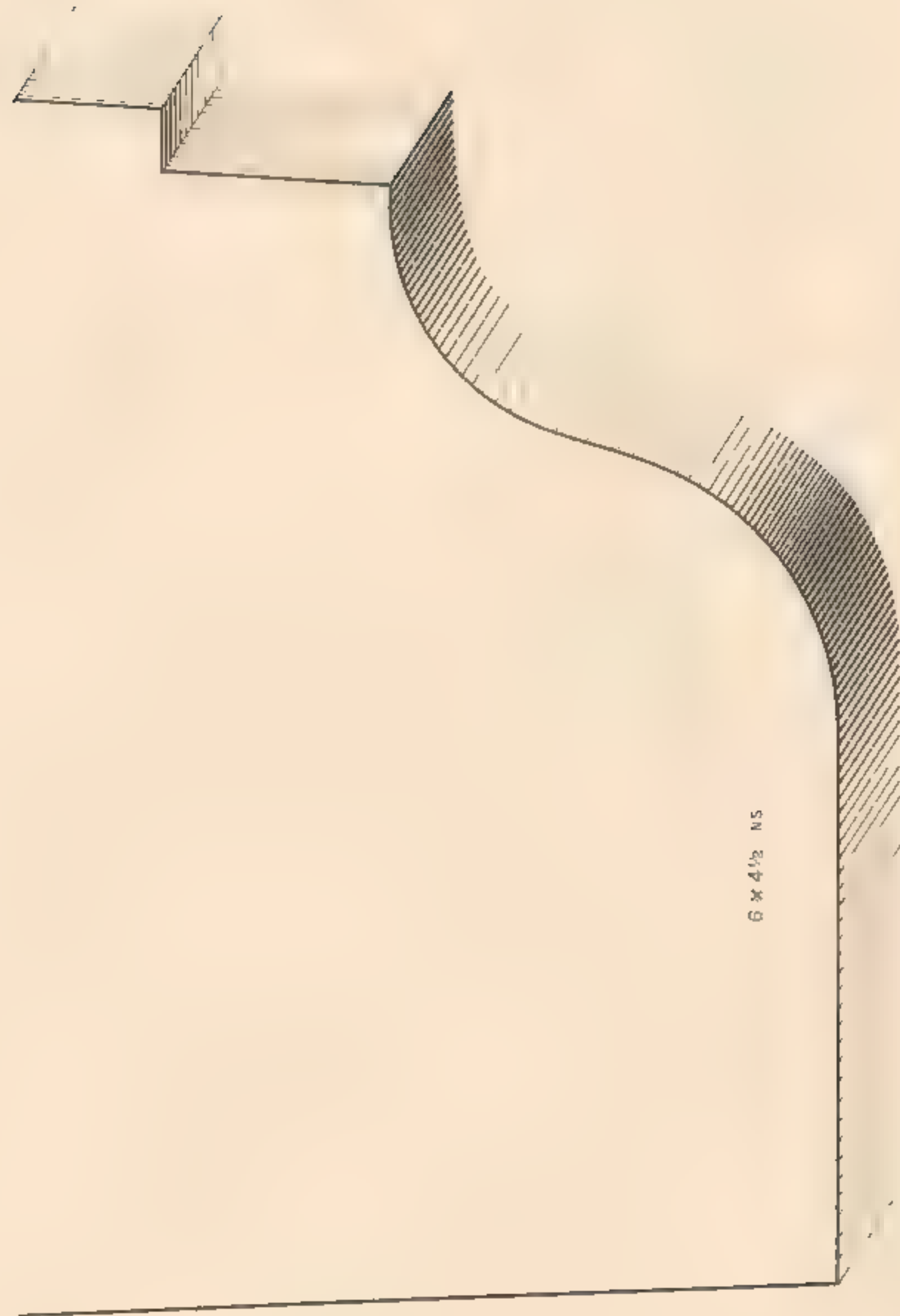
MACFARLANE'S PATENT No 46 ORNAMENTAL GUTTERS



MACFARLANE'S PATENT N° 46 ORNAMENTAL GUTTERS



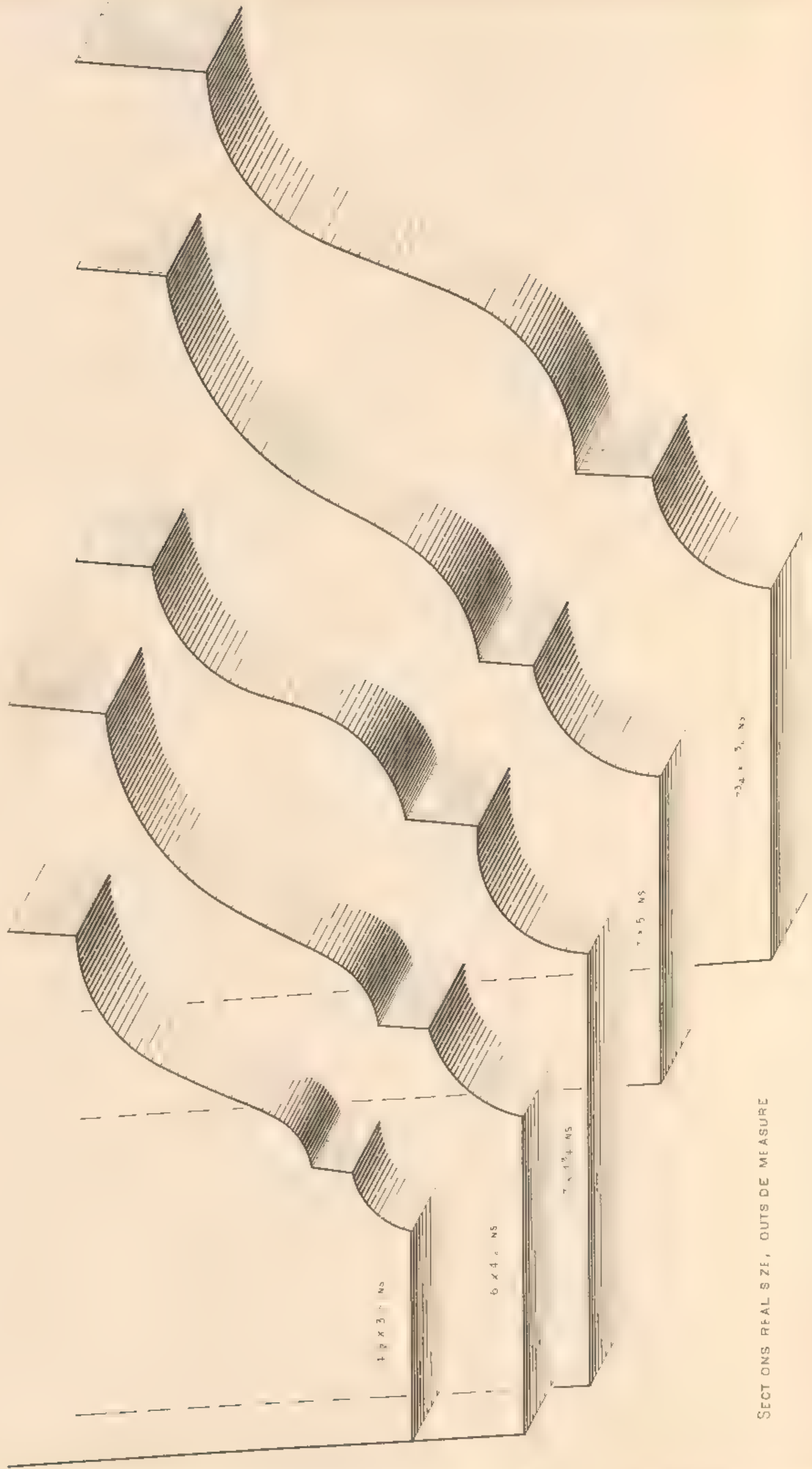
MACFARLANE'S PATENT N° 47. RNAMENTA. GUTTER



6 x 4 1/2 NS

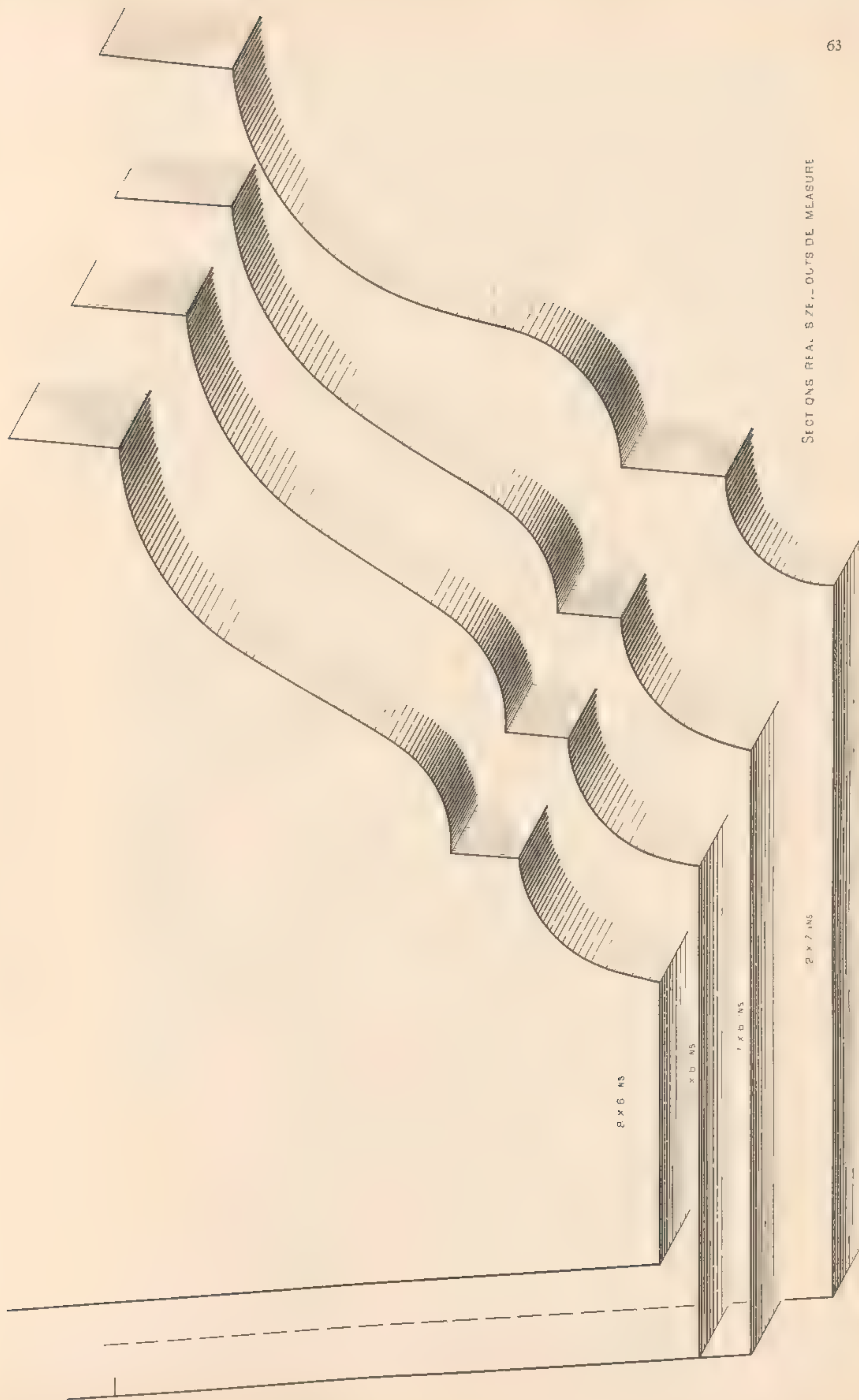
SECTION REAL SIZE - OUTS DE MEASURE

MACFARLANES PATENT N° 42 ORNAMENTAL GUTTERS

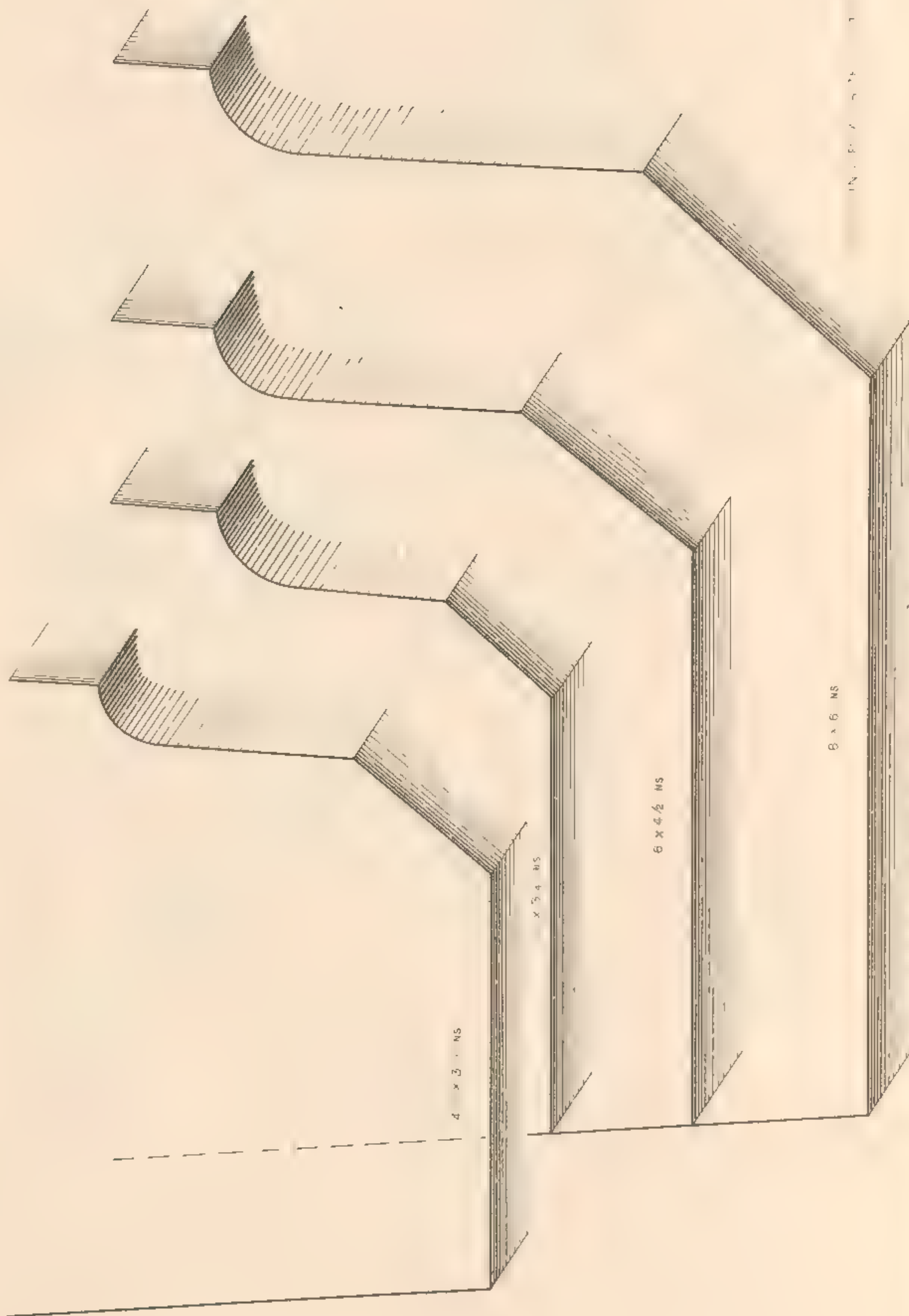


SECTION REAL SIZE, OUTSIDE MEASURE

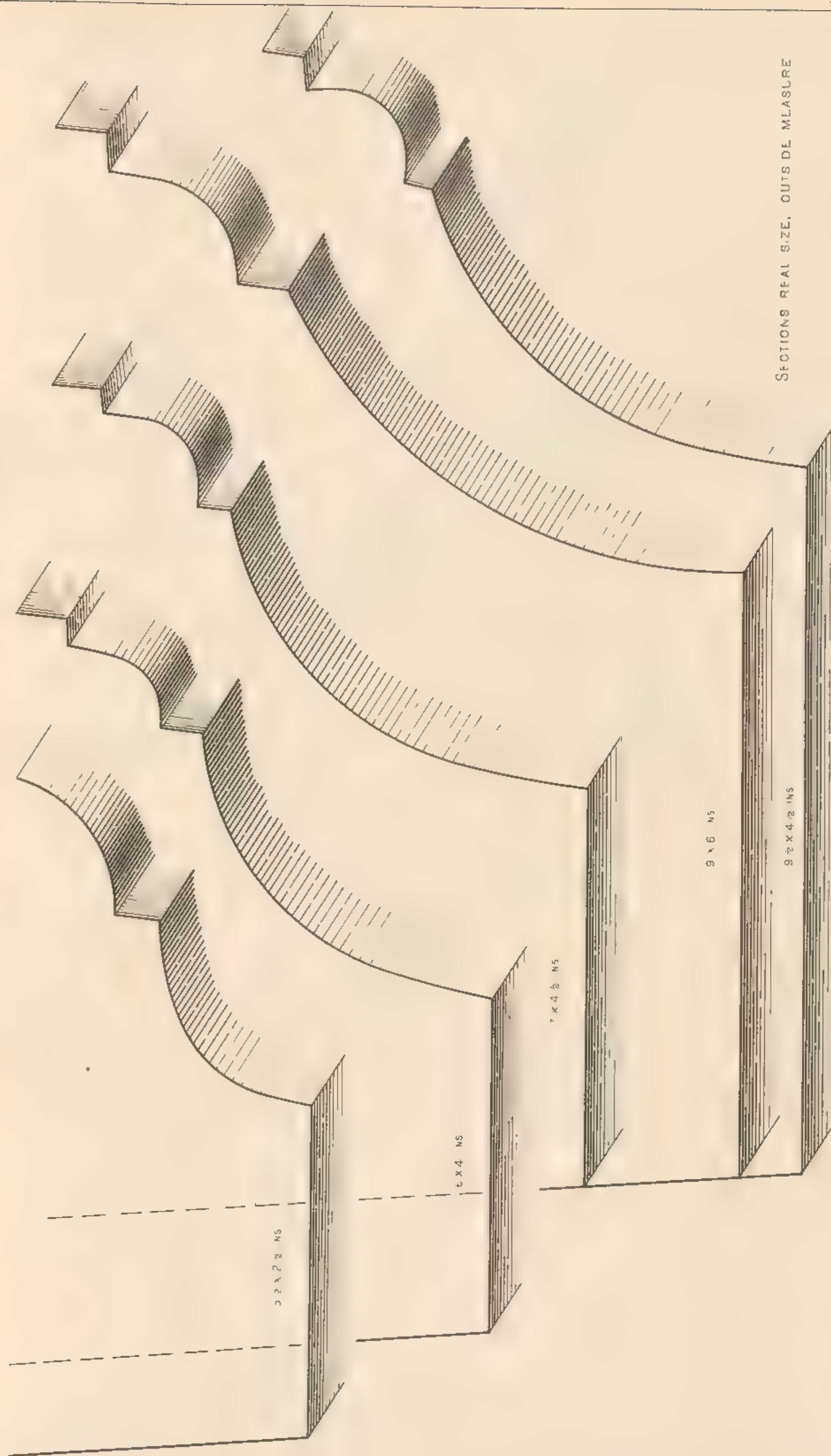
MACFARLANE'S PATENT NO 48 ORNAMENTAL GLITTERS



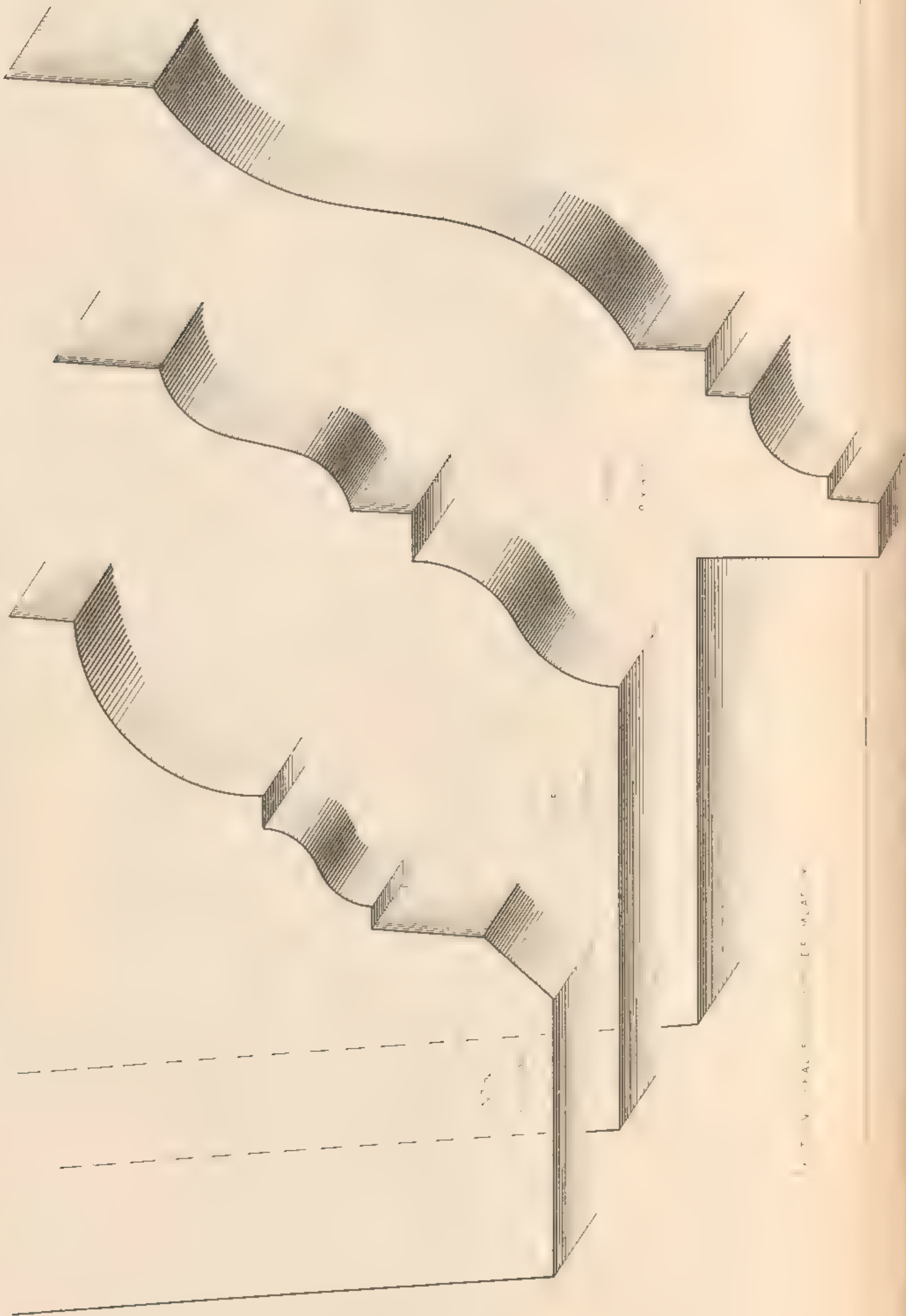
MACFARLANE'S PATENT No 49 ORNAMENTAL GUTTERS



MACFARLANE'S PATENT No 50 ORNAMENTAL GUTTERS

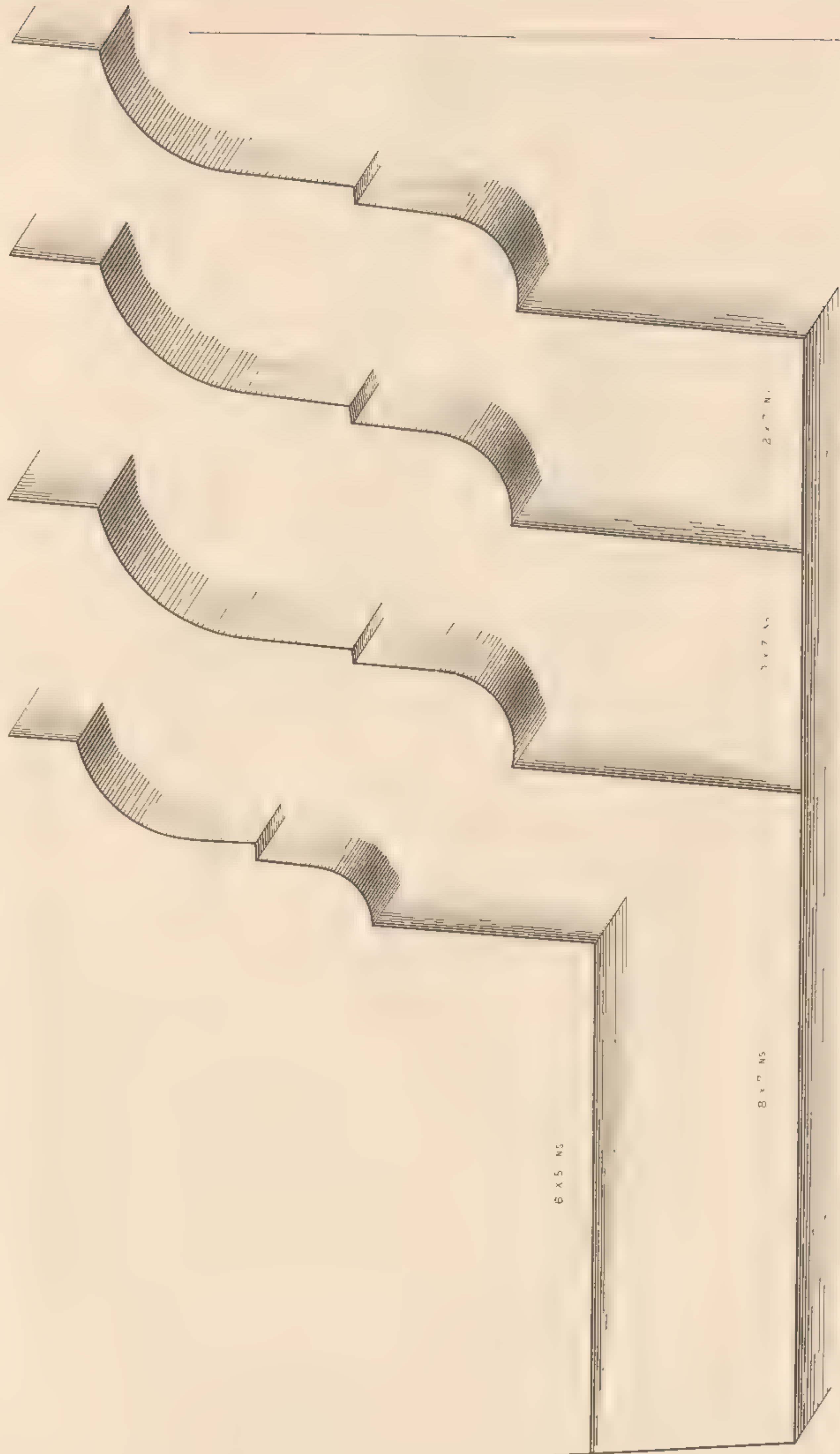


MACFARLANE'S PATENT NO. 54 APR 55 ORNAMENTAL PERS



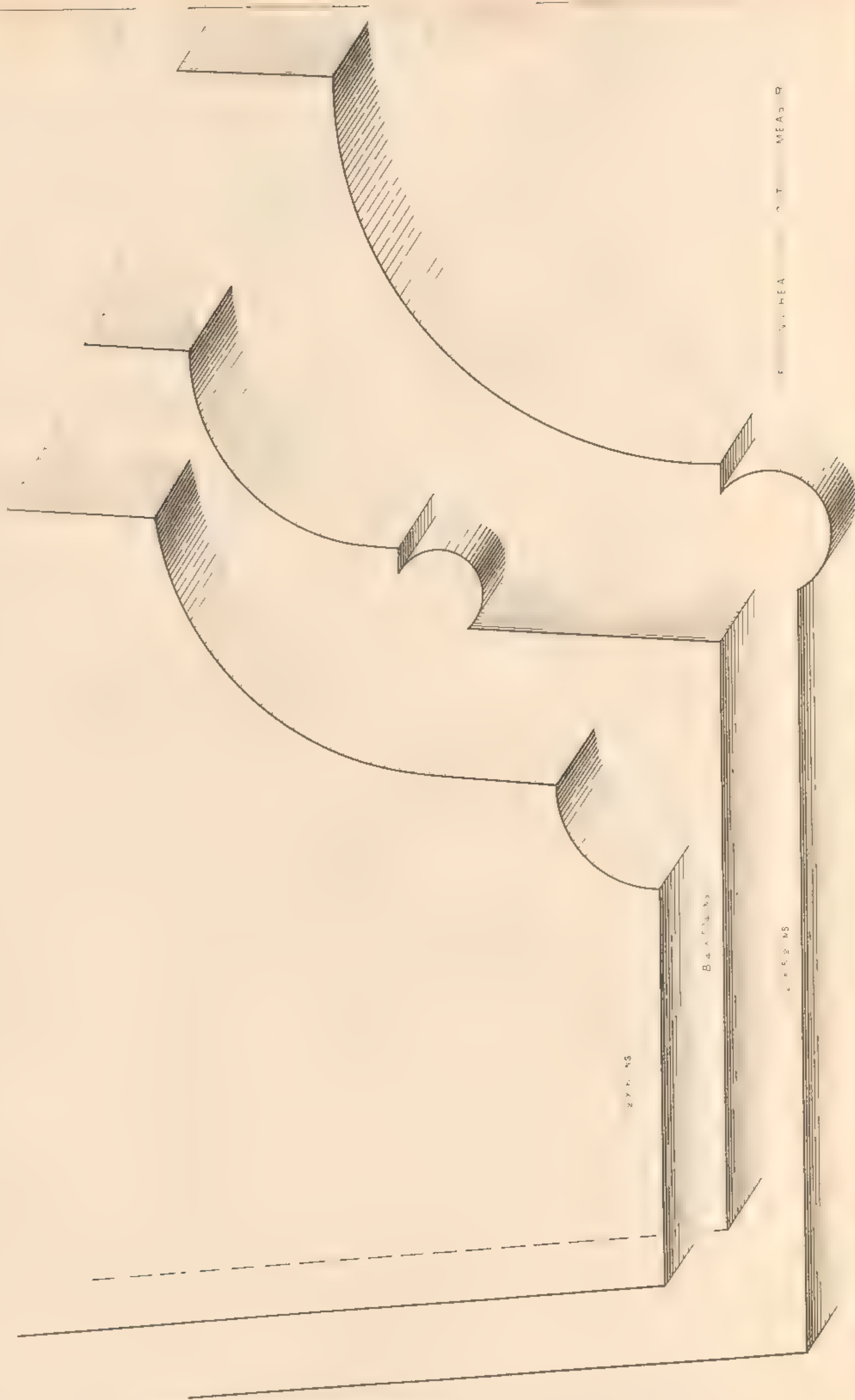
MACFARLANE'S PATENT NO. 54 APR 55 ORNAMENTAL PERS

MACFARLANE'S PATENT No 57 ORNAMENTAL GUTTERS



SECTIONS REAL SIZE, OUTSIDE MEASURE

MACFARLANE'S PATENT NO 60 ORNAMENTAL GUTTERS



MEASUREMENTS

B 4 x 1 1/4 x 1/2

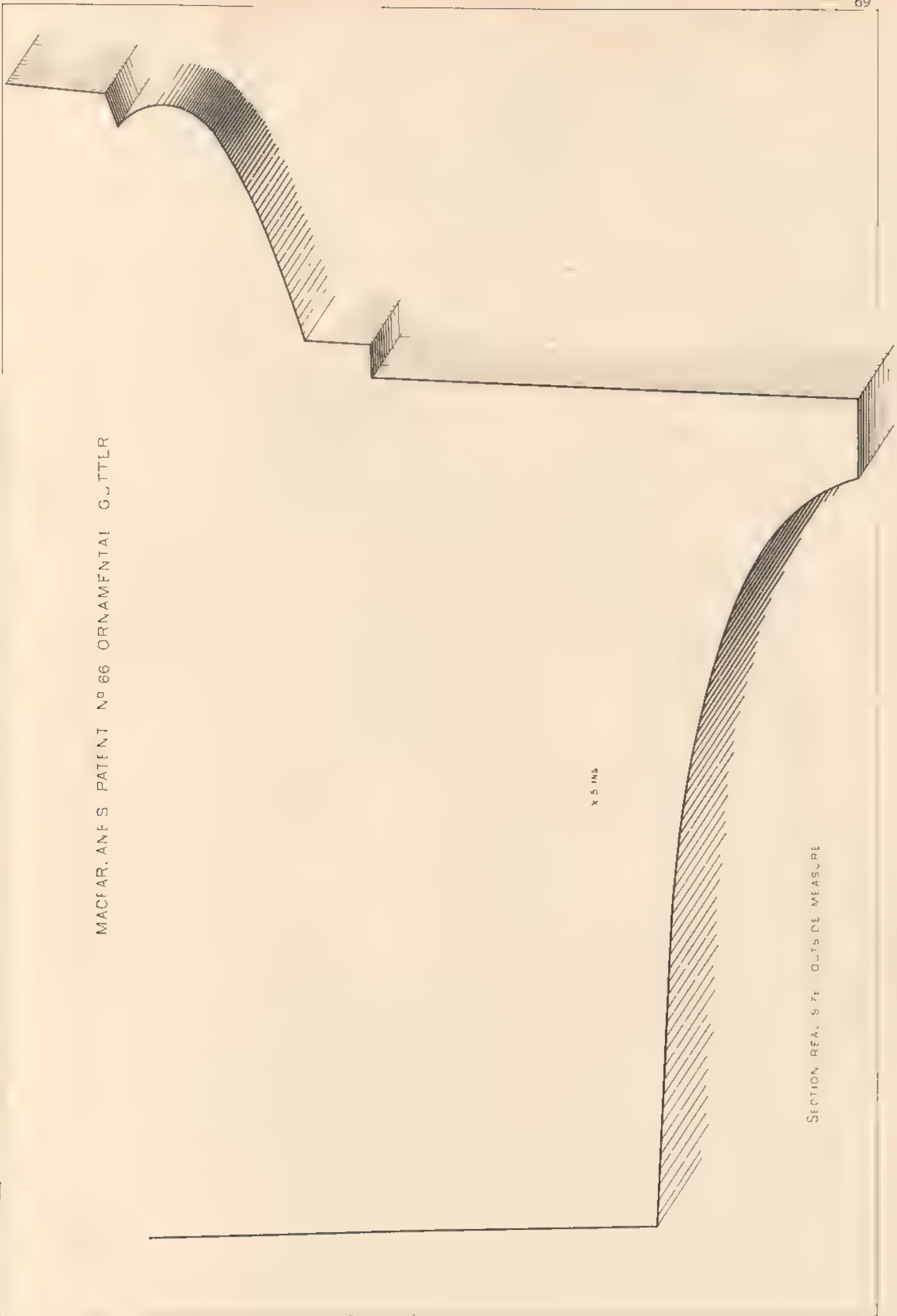
4 x 5 1/2 x 1/2

2 x 1 1/2 x 1/2

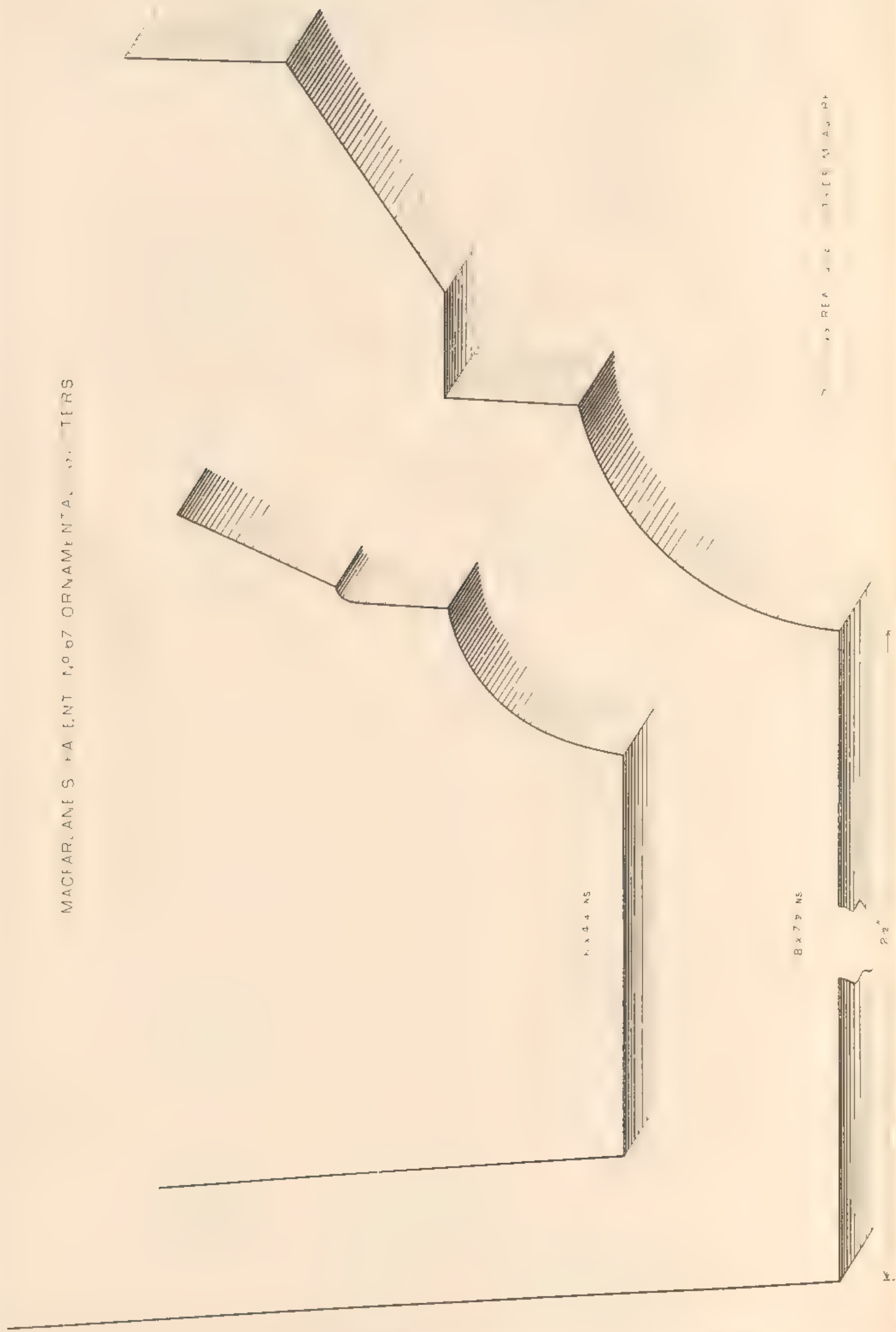
MACFARLANE'S PATENT N° 66 ORNAMENTAL GUTTER

X 5 INS

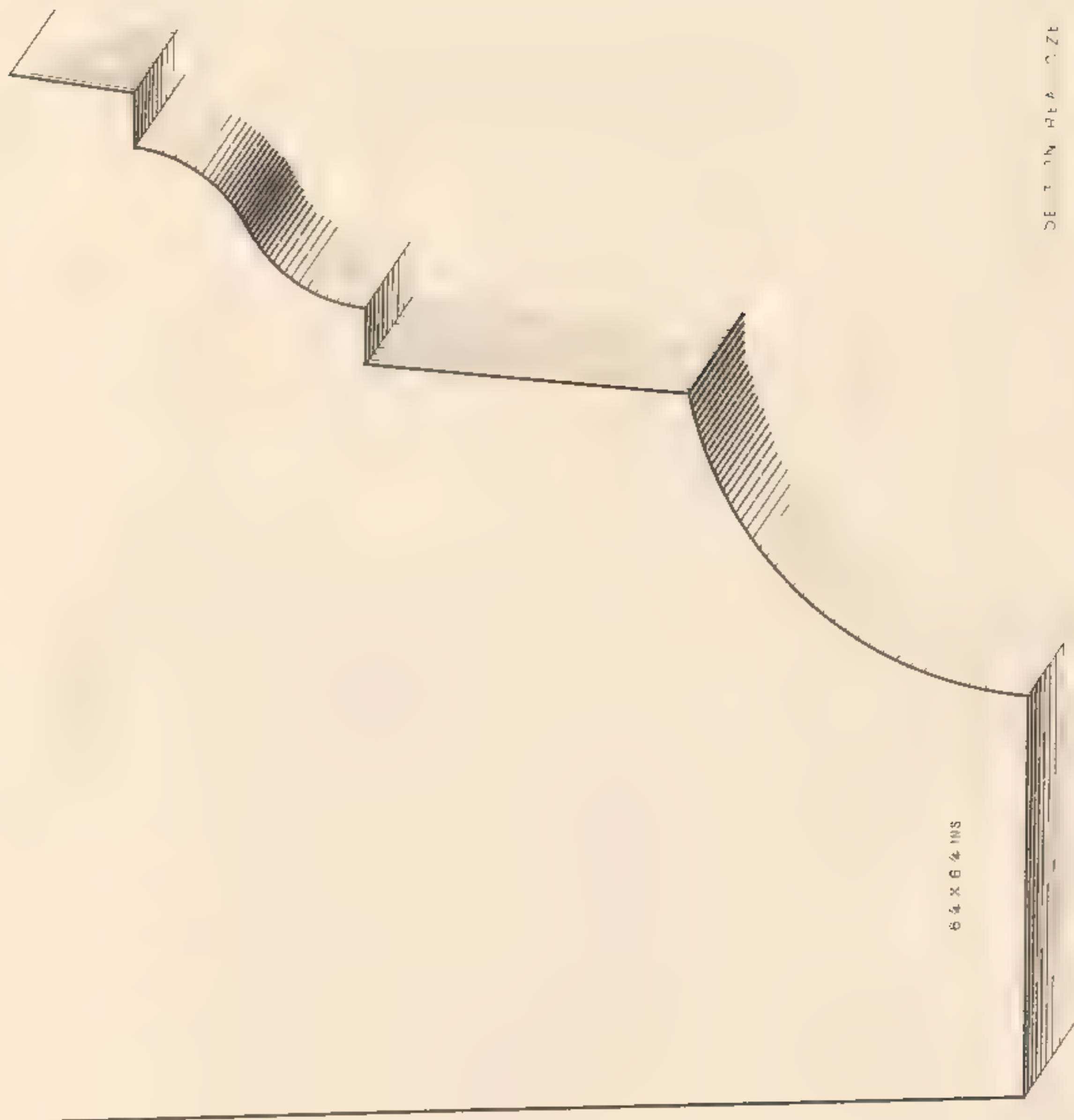
SECTION REAL 5 7/8 OUTSIDE MEASURE



MACROPHAGES + A LENT 1,067 ORNAMENTAL ... TERS



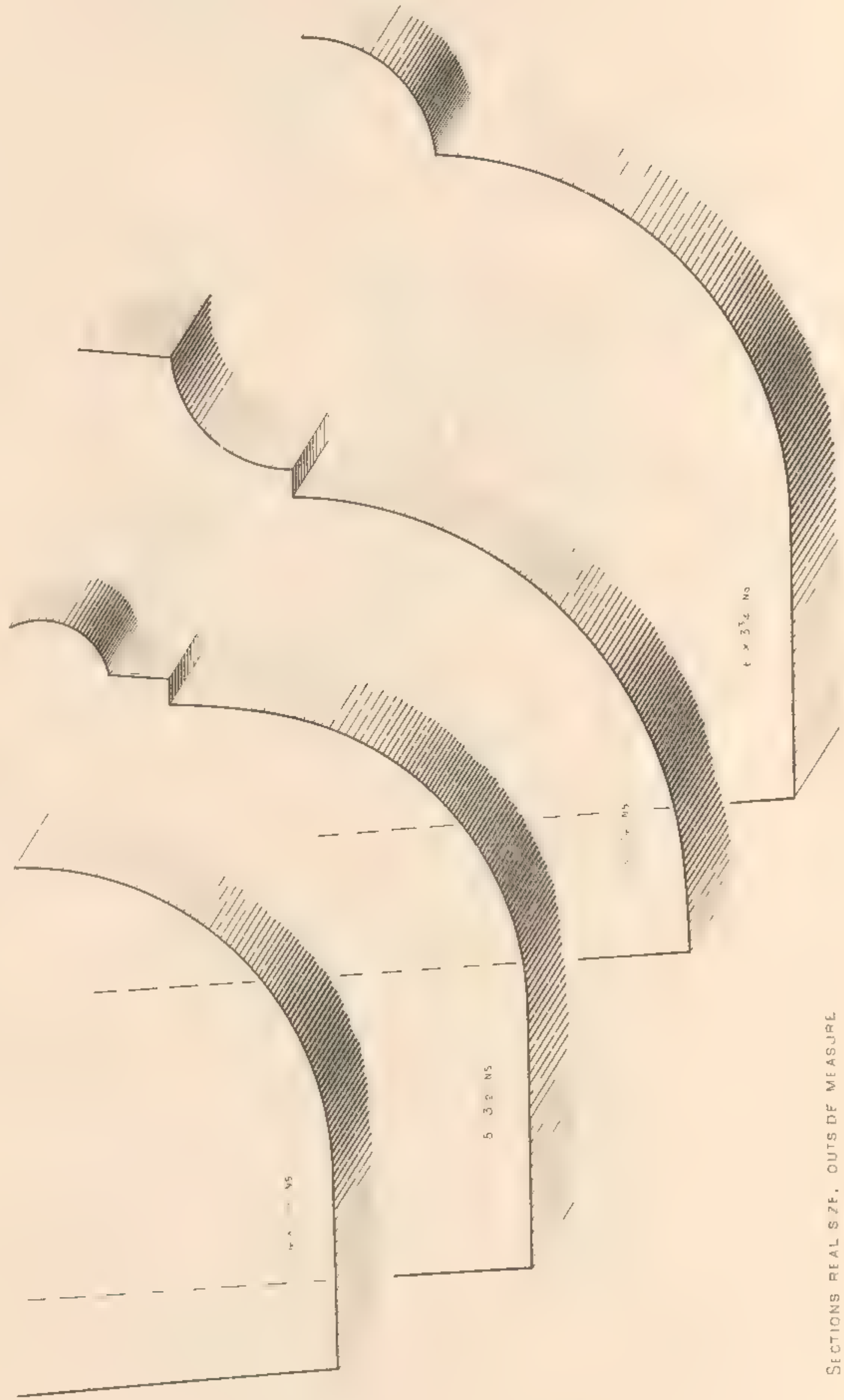
MACFARLANE'S PATENT Nº 73 ORNAMENTAL GUTTER.



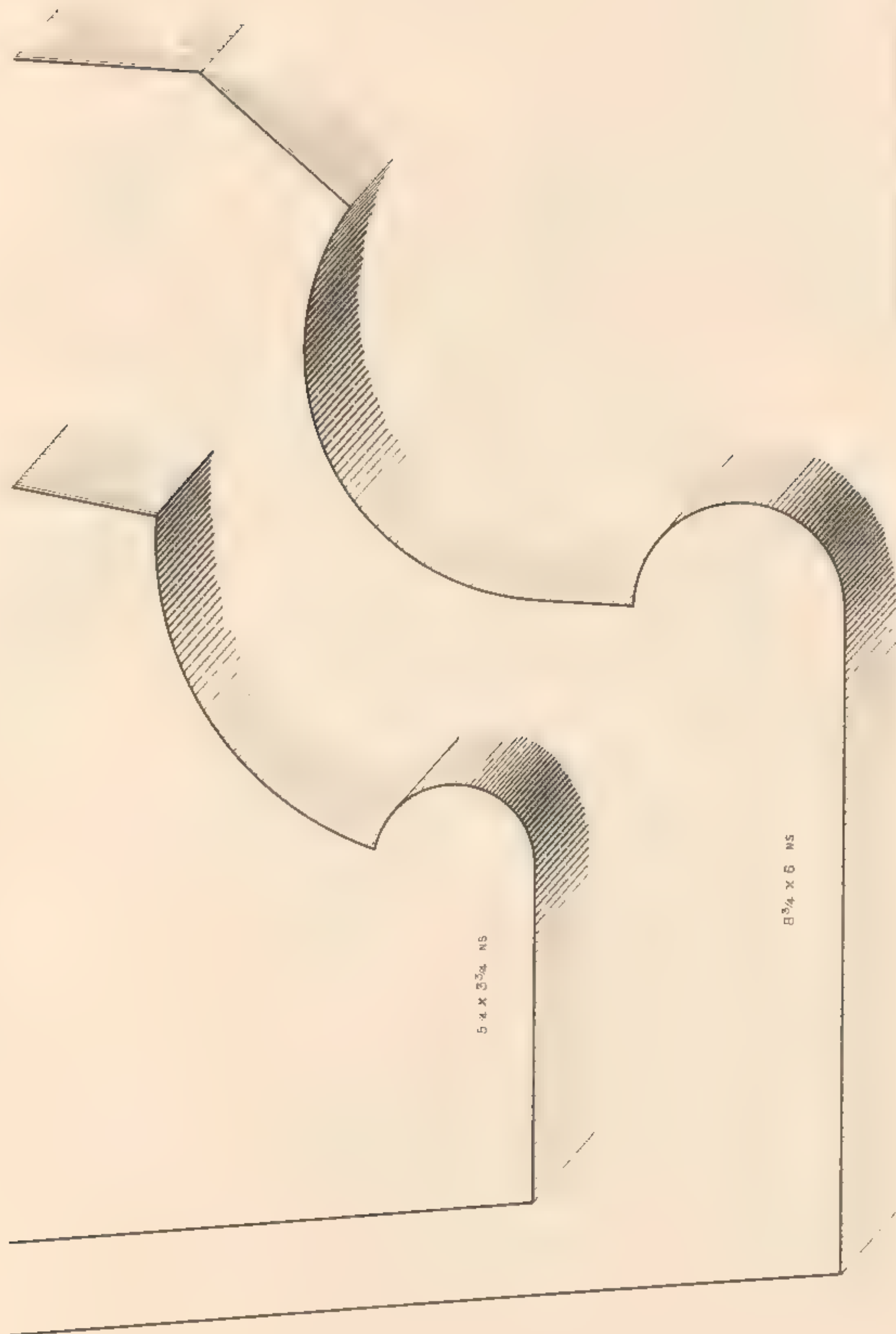
SECTION OF SIDE MEASUREMENT

6 1/4 X 6 1/4 INS

MACIARLANE'S PATENT N° 82 ORNAMENTAL GLTIERS



SECTIONS REAL SIZE, OUTSIDE MEASURE



SEE FIG. 1



SECTION REAL SIZE OUTSIDE MEASURE

MACFARLANE'S PATENT NO 51 ORNAMENTA, FIGURED GUTTERS

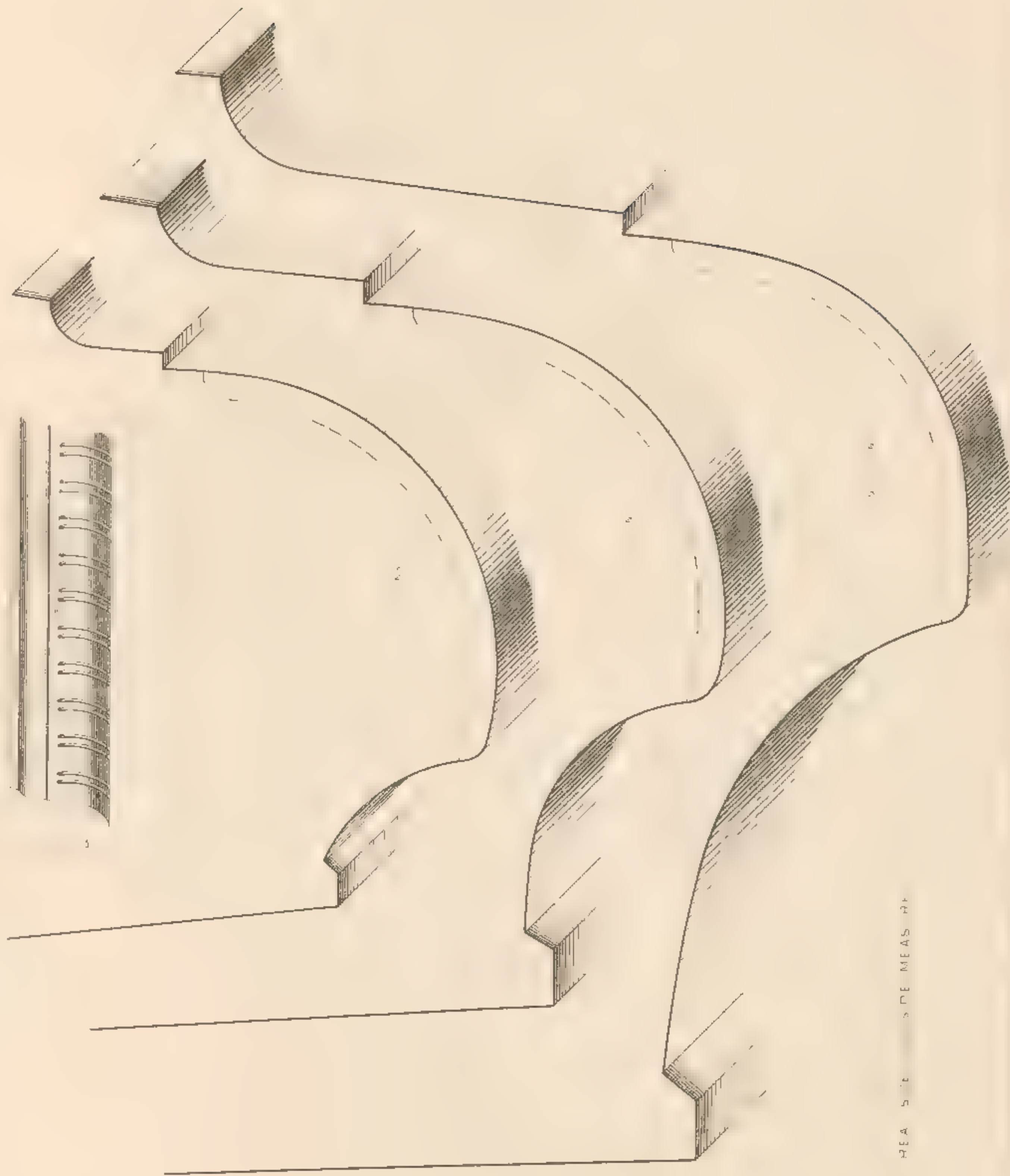
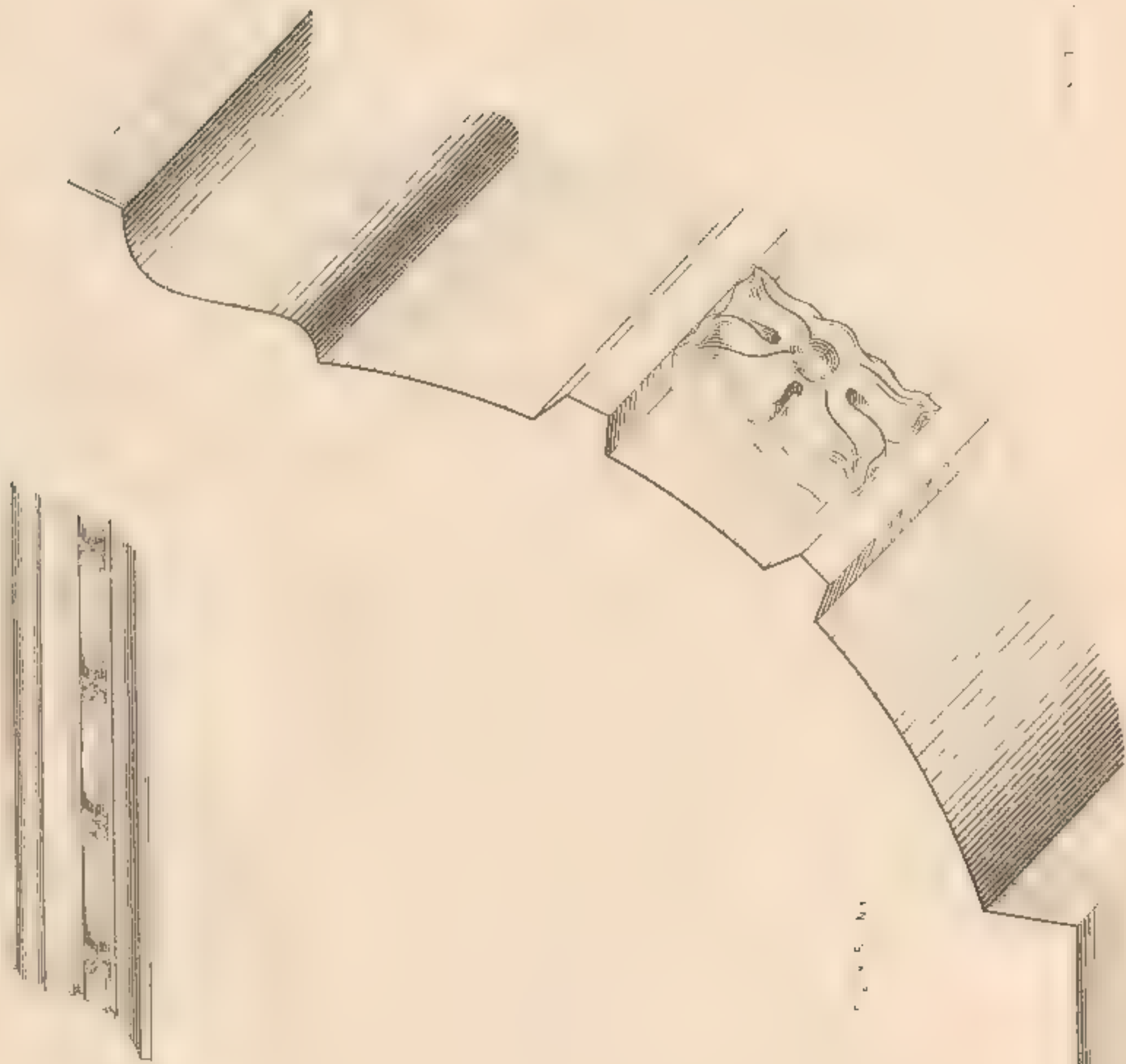
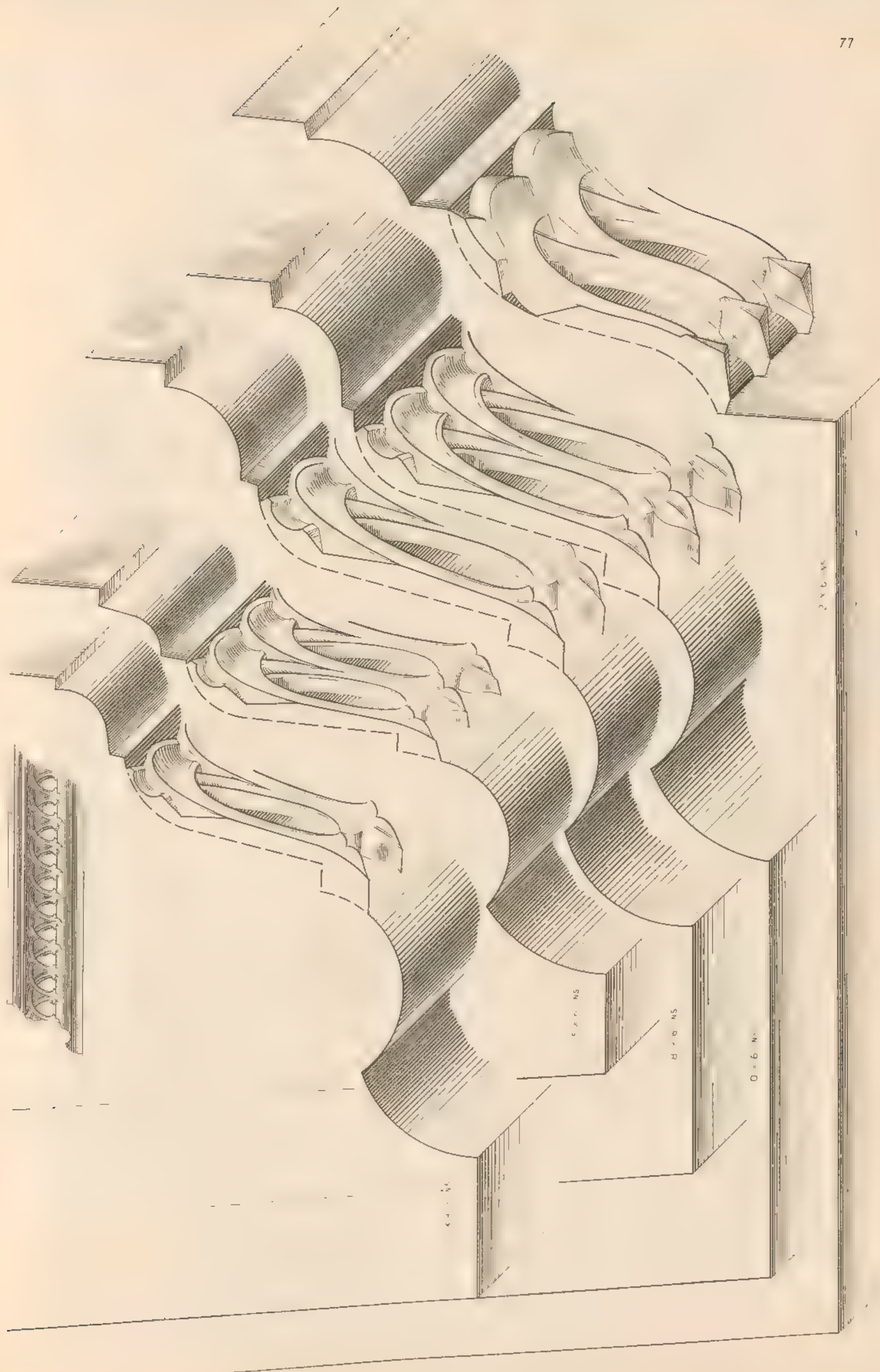


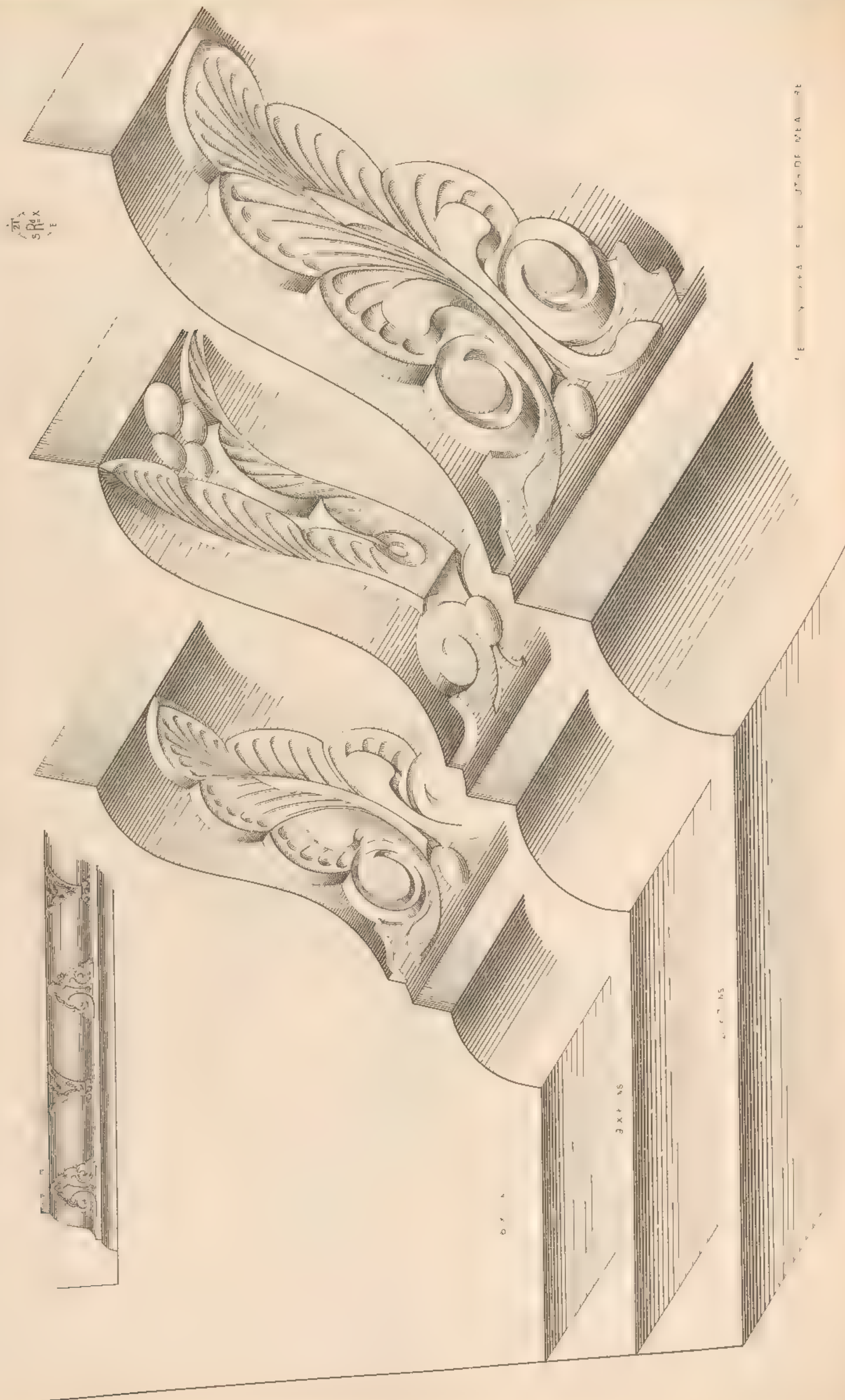
FIG 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

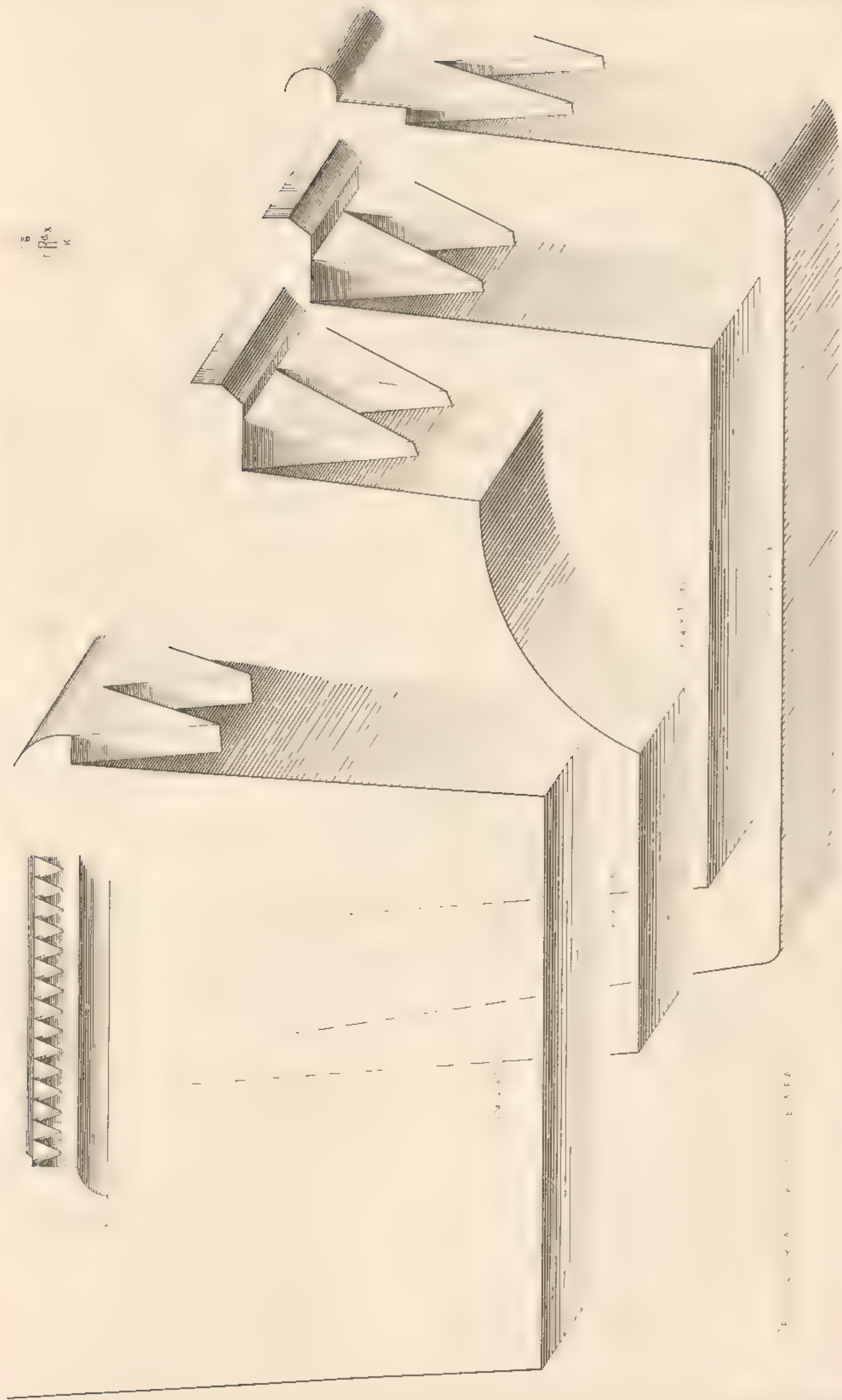
MACFARLANE'S PATENT NO 53 ORNAMENTAL TYPE





ELT. & REAR VIEW OF GUTTER MEAS. RE





MA FARLANE S PATENT, Nos 62 AND 63 ORNAMENTAL FIGURED GUTTERS

No 62

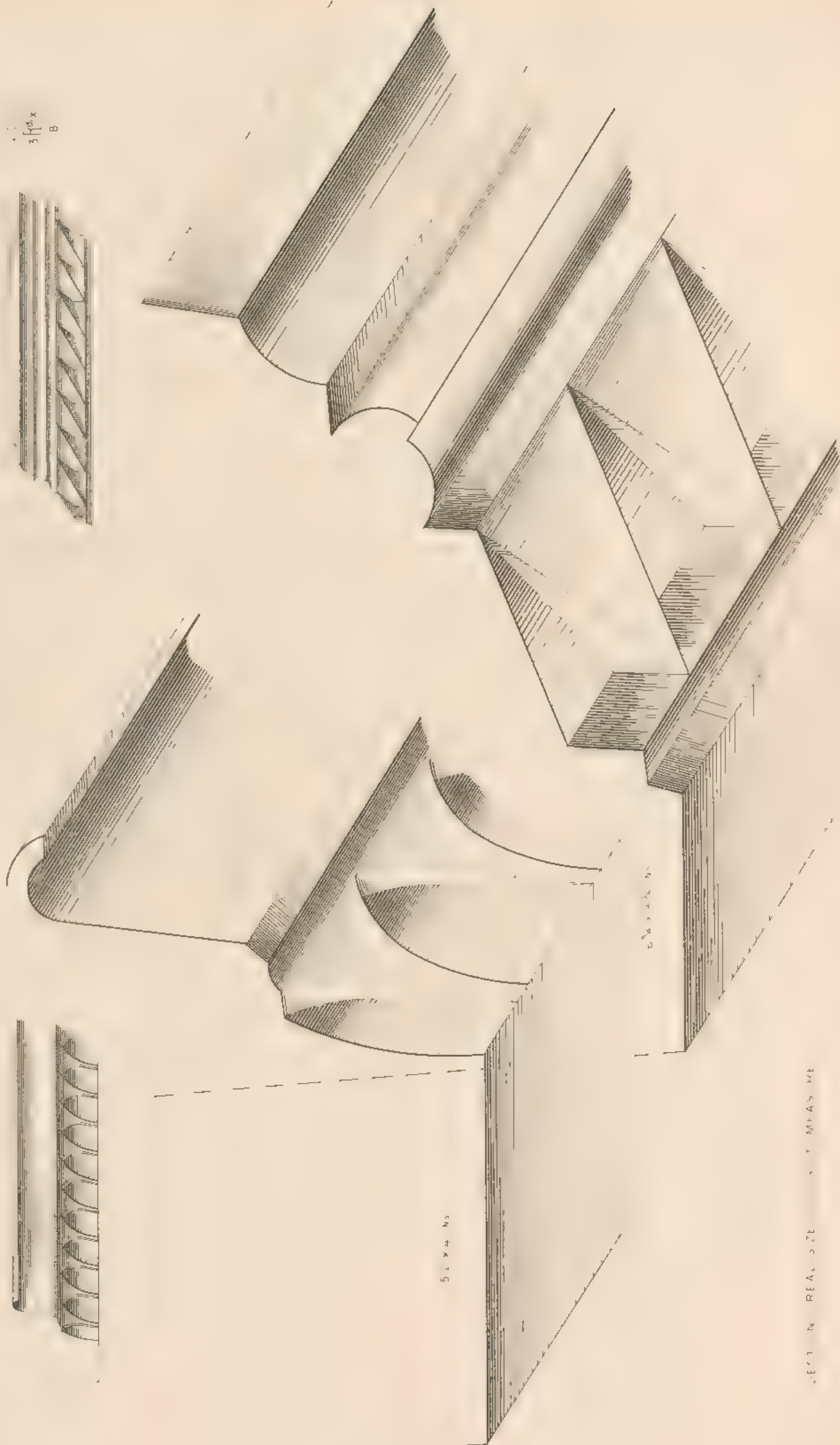


No 63



3 1/2 x 5
B

5 x 8 No

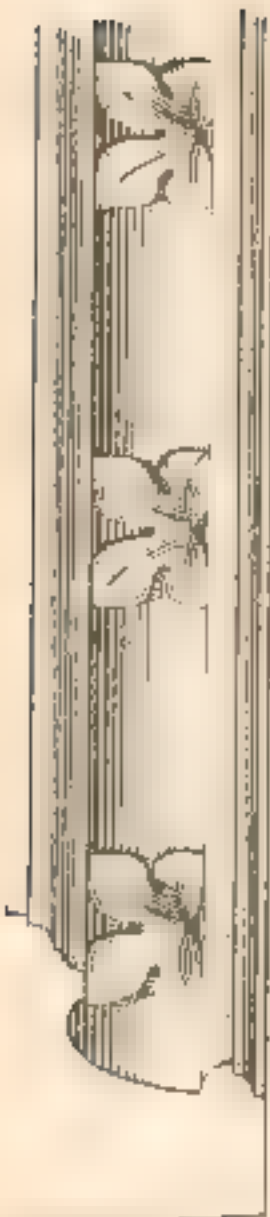
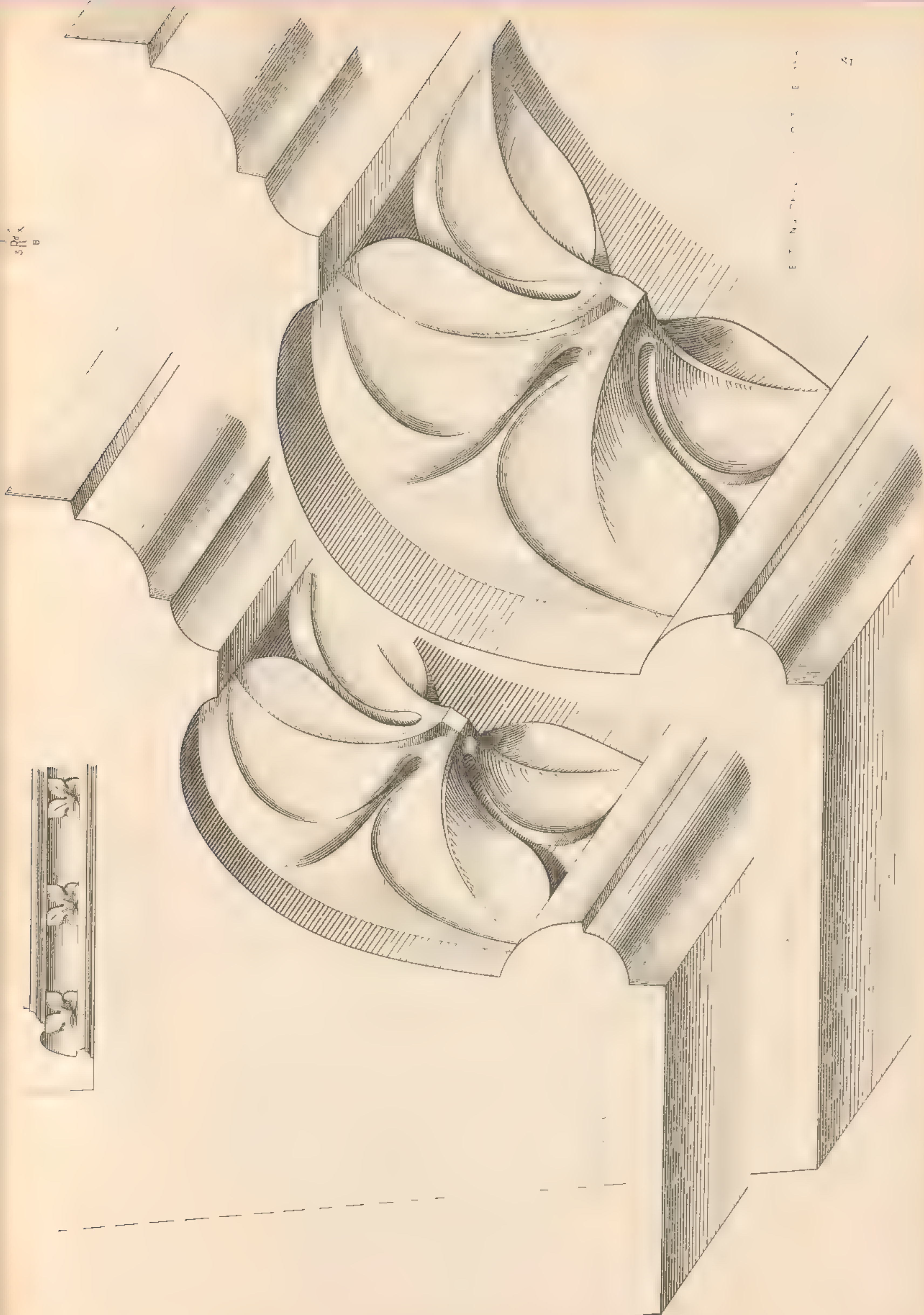


MA FARLANE S PATENT, Nos 62 AND 63 ORNAMENTAL FIGURED GUTTERS

31
Rd
B

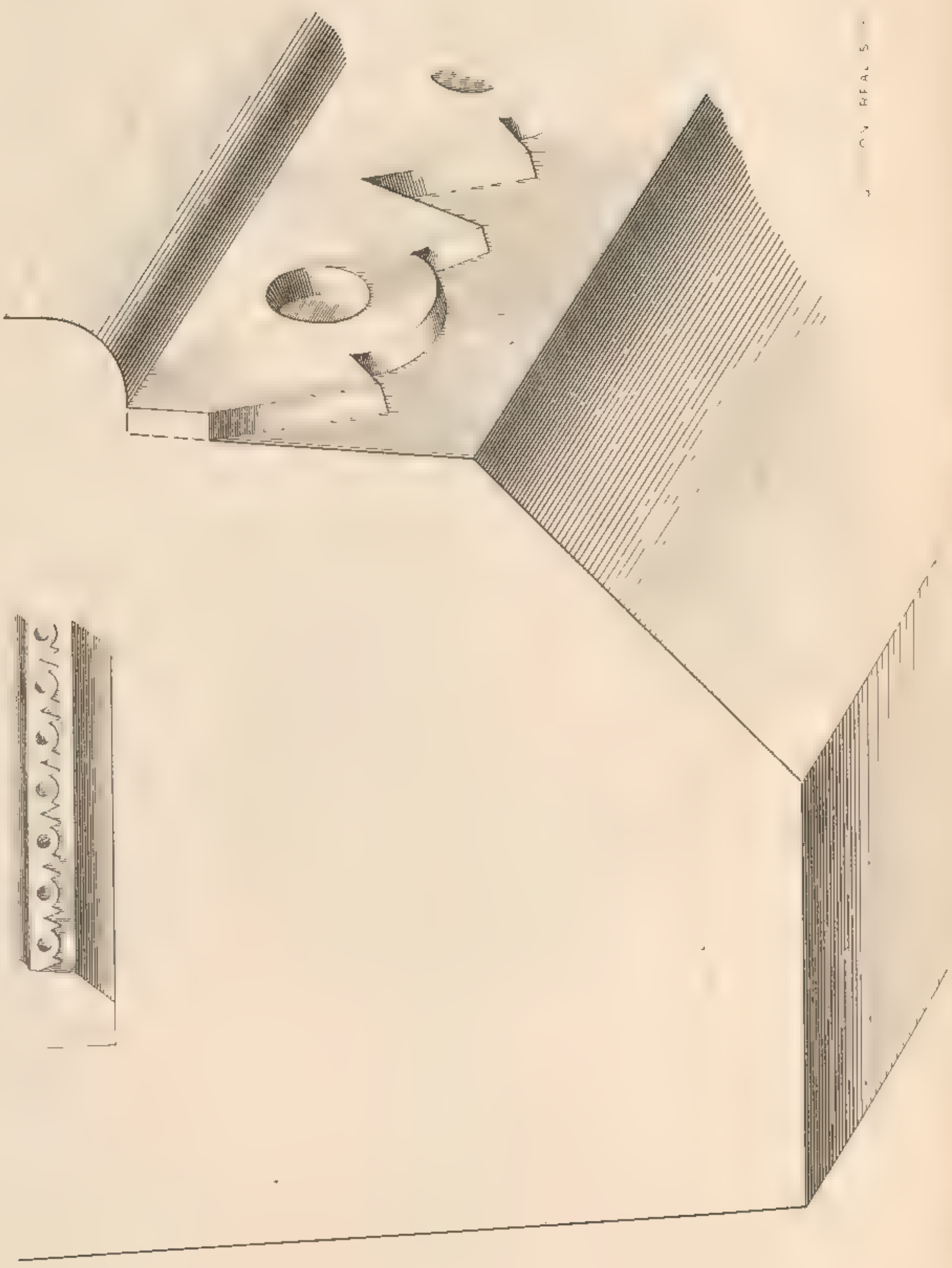
ET NUNCIUM COT ELLI

21

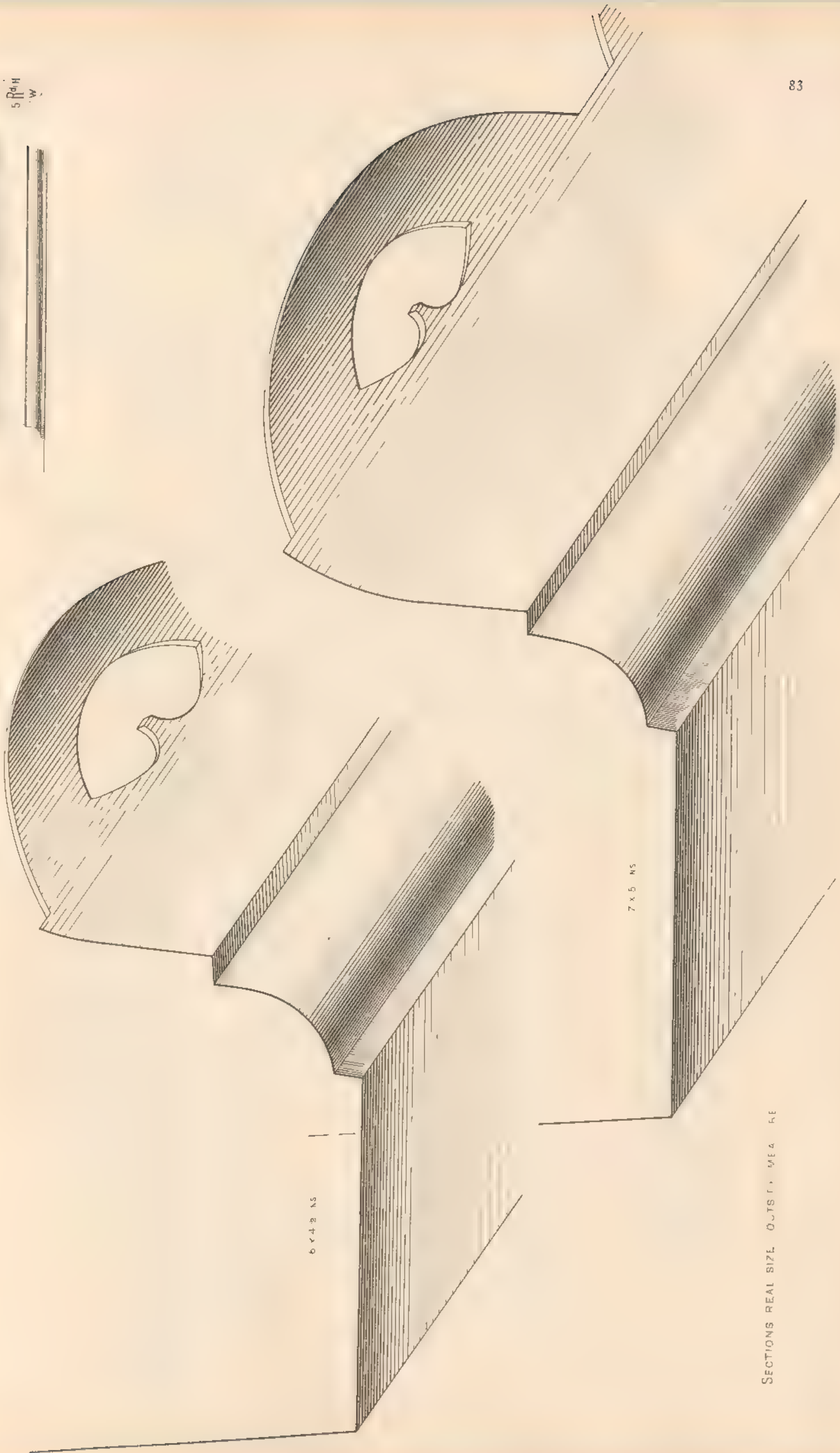


MACFARLANE'S PATENT NO 65 JAMMATA F S FRI TTER

3 R x
B



J. C. F. & S. LONDON

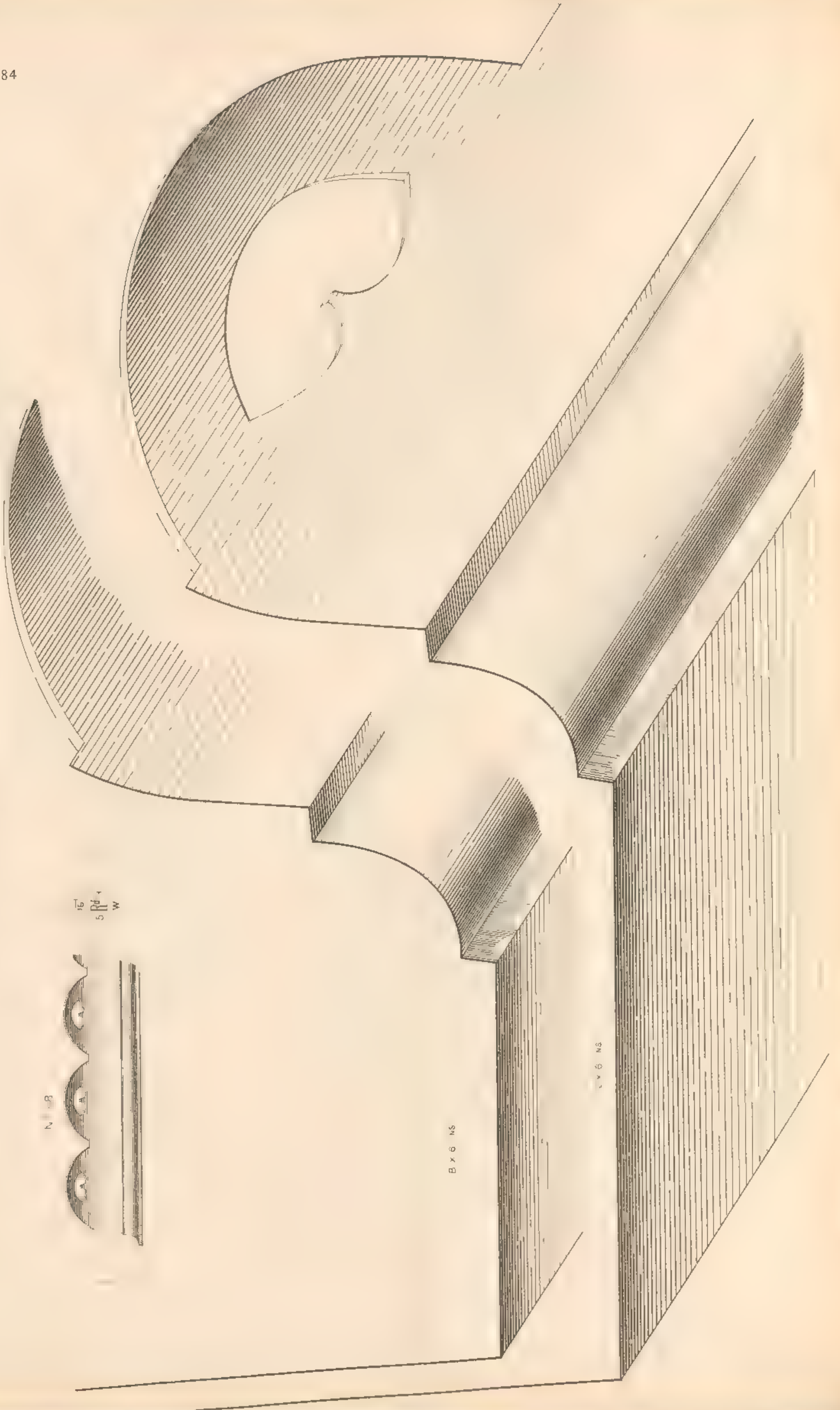


6 x 4 2 NS

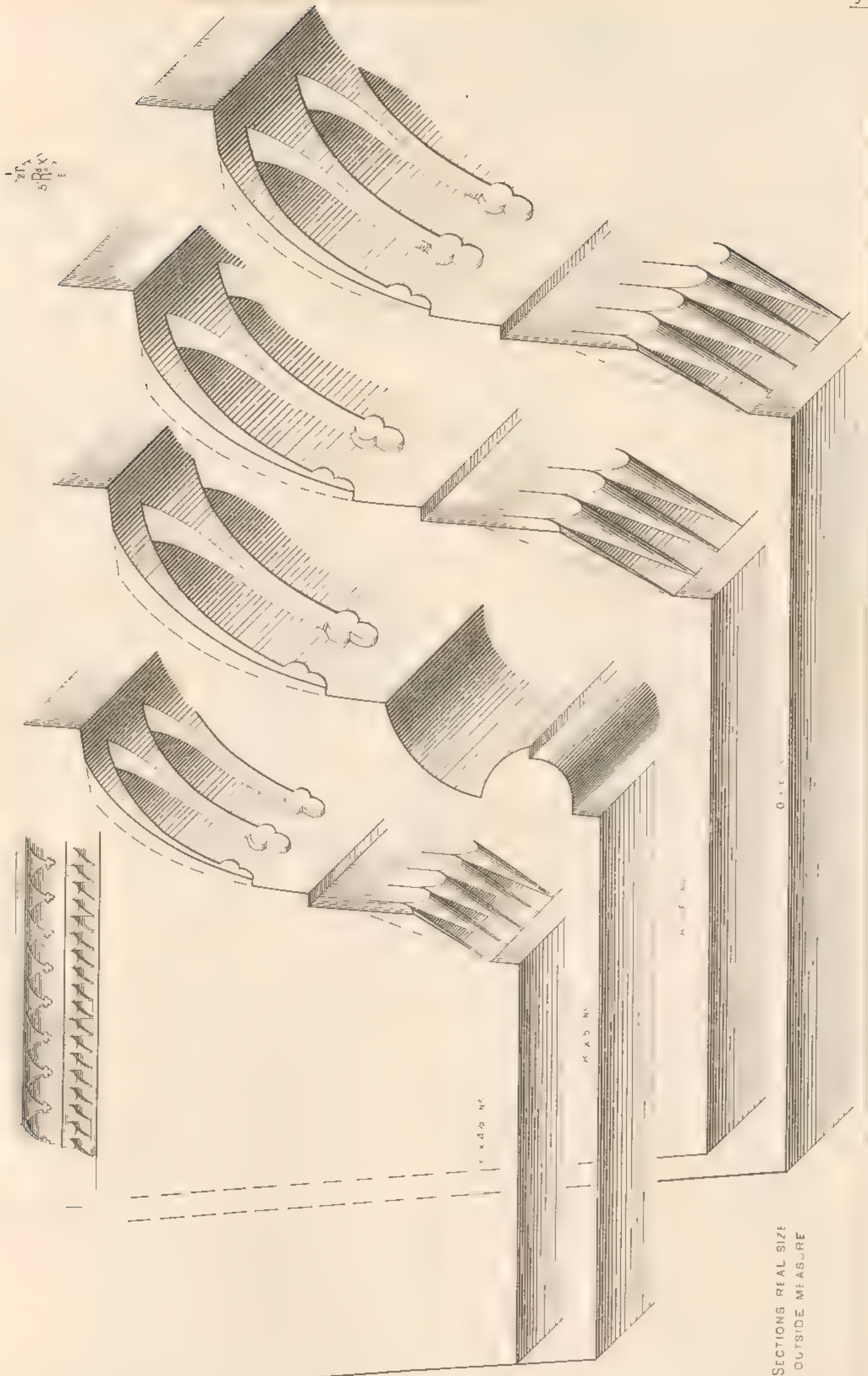
7 x 5 NS

SECTIONS REAL SIZE OUTSIDE MEASUREMENT

MACHAR, ANE'S PATENT NO 68 ORNAMENTAL FIGURED LETTERS

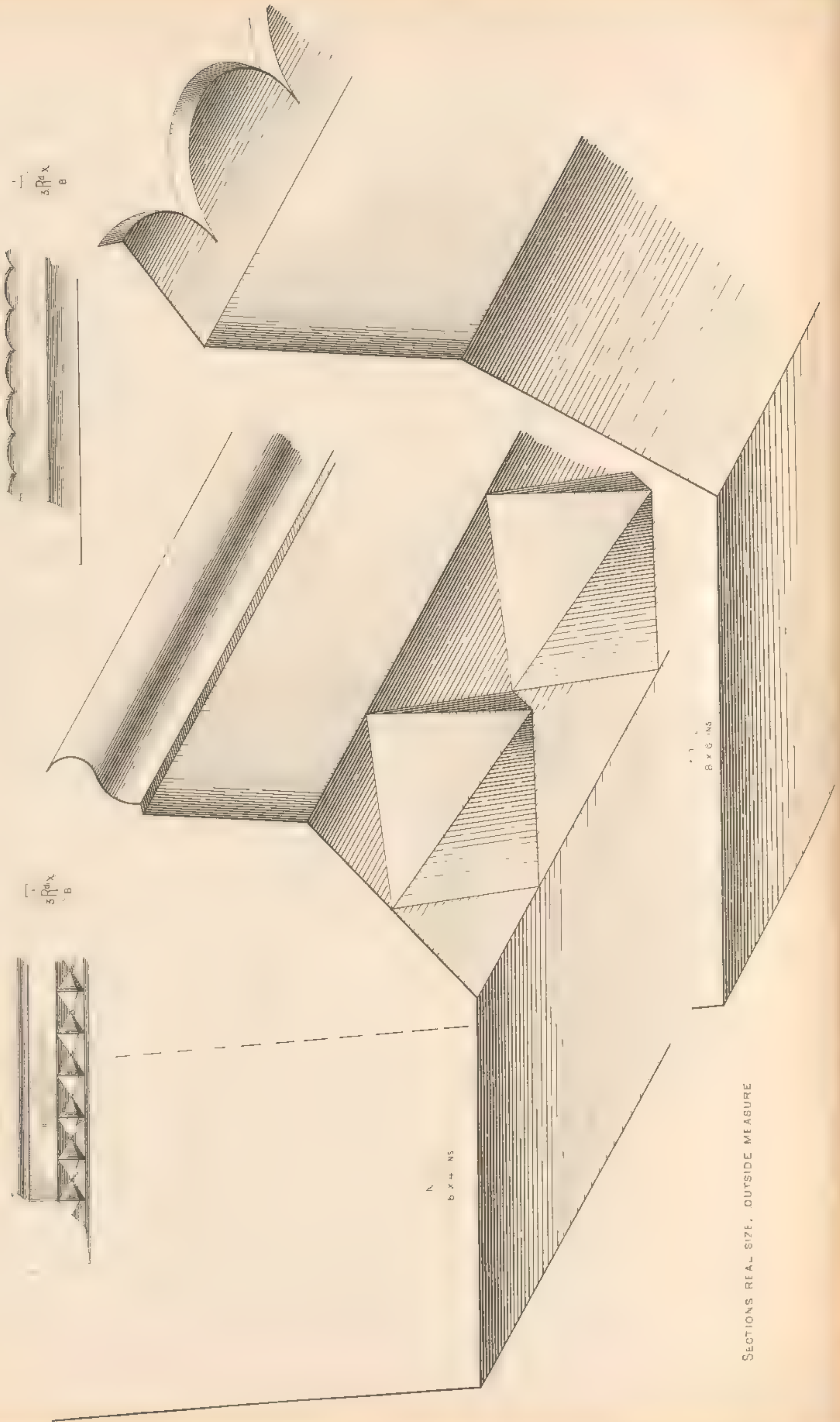


MACFARLANE'S PATENT N° 70 ORNAMENTAL FIGURED GUTTERS.



SECTIONS REAL SIZE
OUTSIDE MEASURE

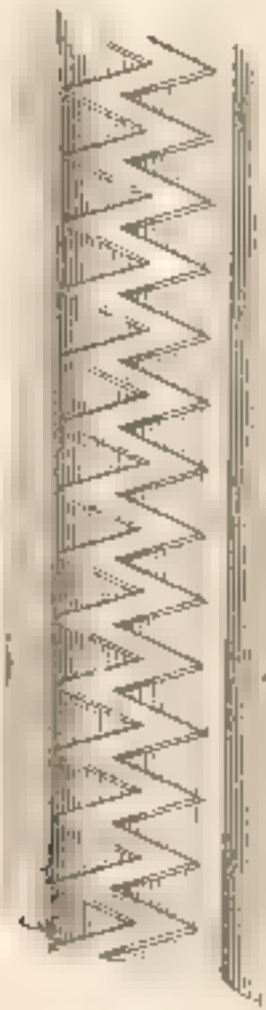
MACFARLANE'S PATENT NOS 71 AND 72 ORNAMENTAL FIGURED GUTTERS



SECTIONS REAL SIZE, OUTSIDE MEASURE

MA. FARLANE'S PATENT NOS 73 AND 84 ORNAMENTAL FIGURED GUTTERS

No 84

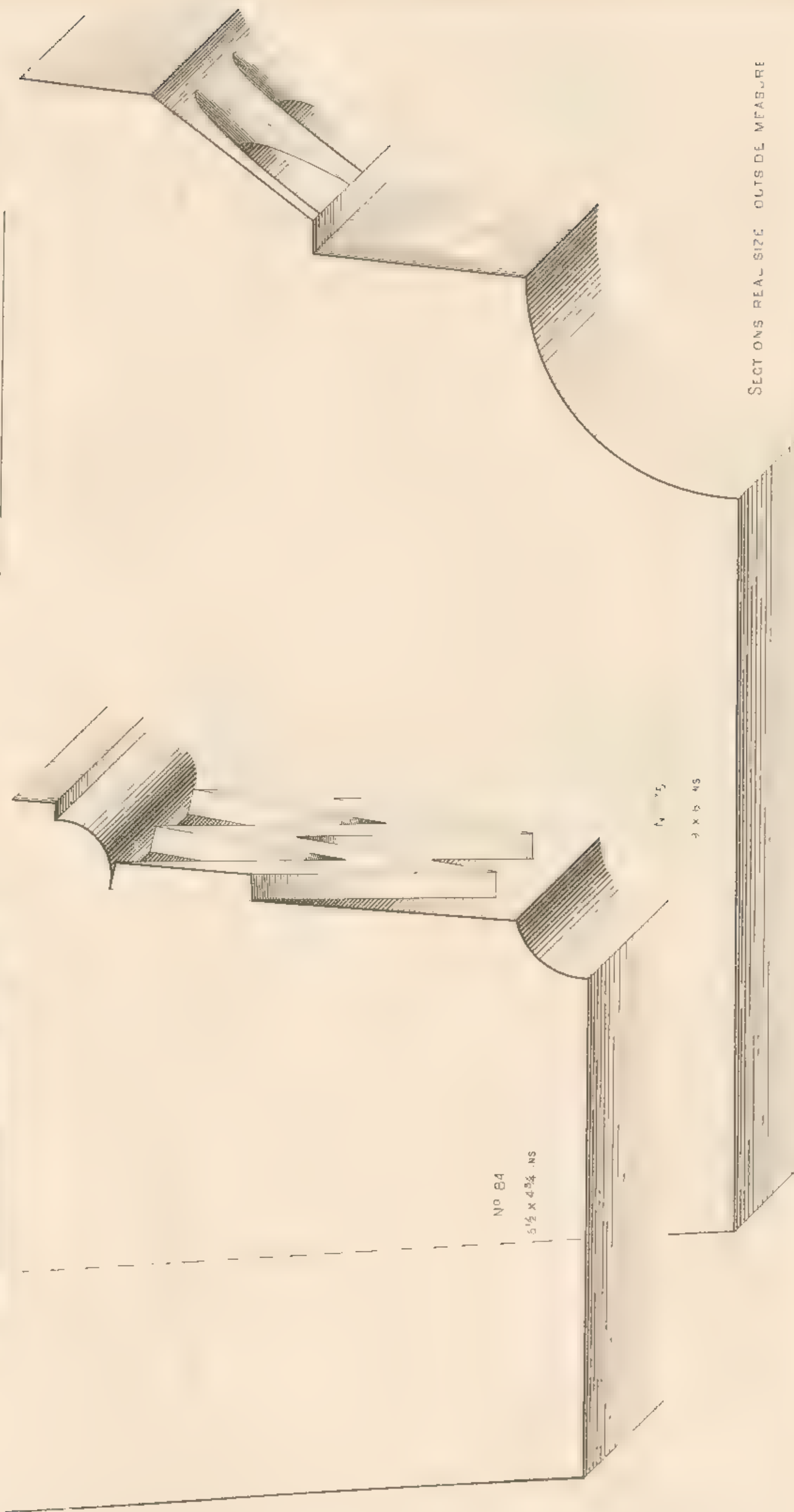


$\frac{1}{2}$ B
3 R
H

No 73



$\frac{1}{2}$ B
3 R
H



No 84

$5\frac{1}{2} \times 4\frac{3}{4}$ INS

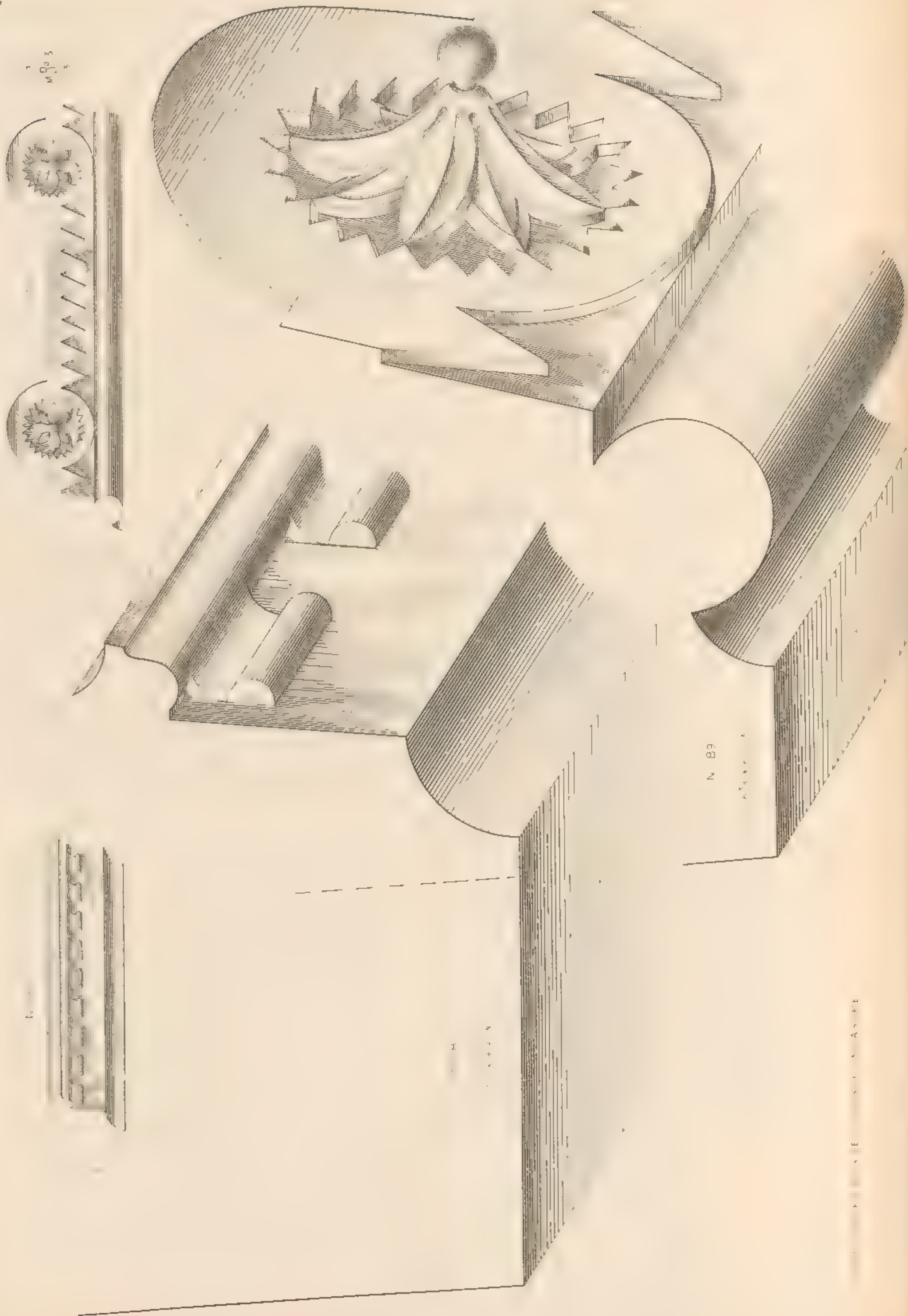
No 73

$3 \times 5 \times 4\frac{1}{2}$

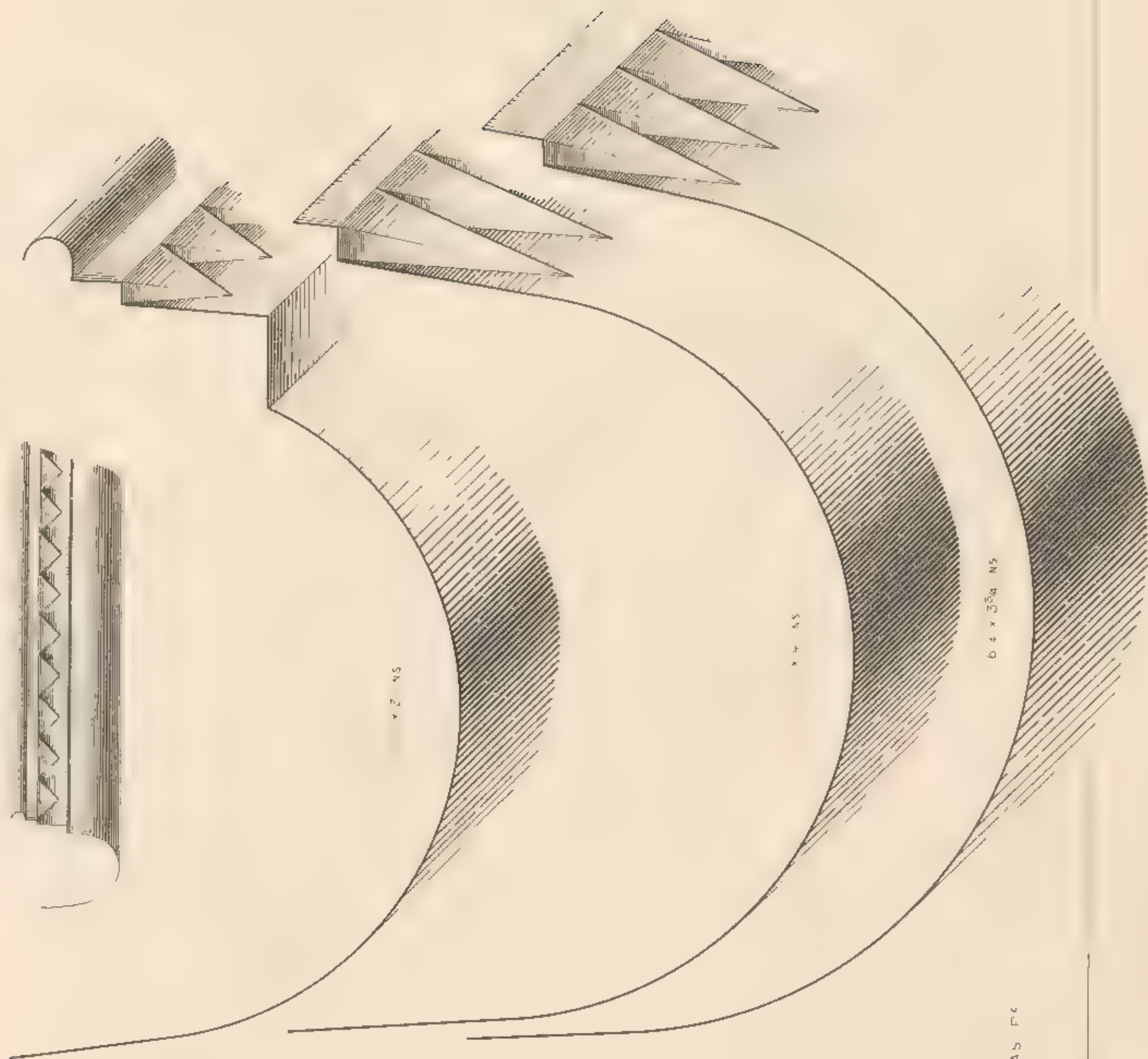
SECTIONS REAL SIZE OUTSIDE MEASURE

MACFARLANE'S PATENT NOS 87 AND 89 ORNAMENTAL FIGURED GUTTERS

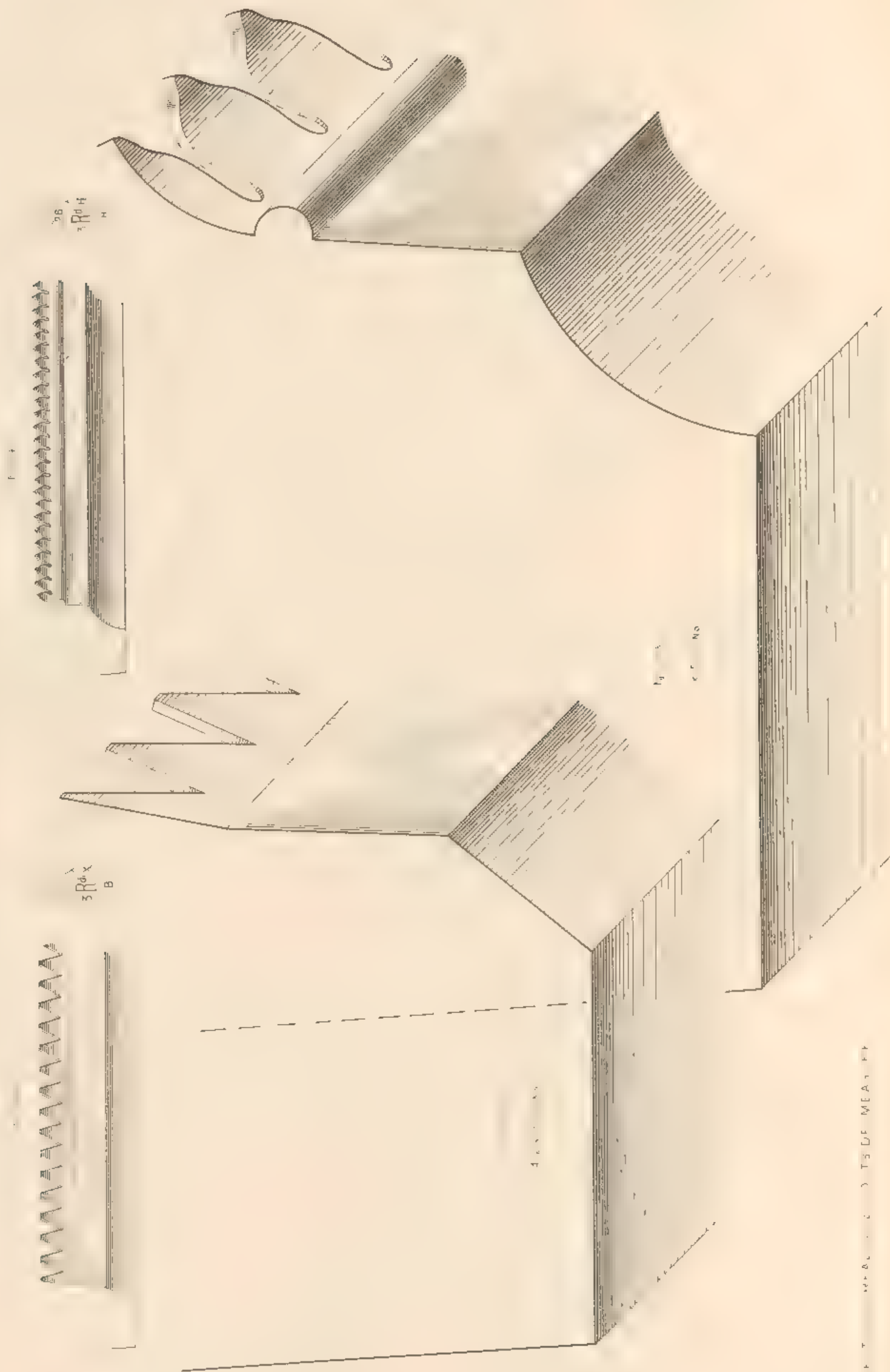
89



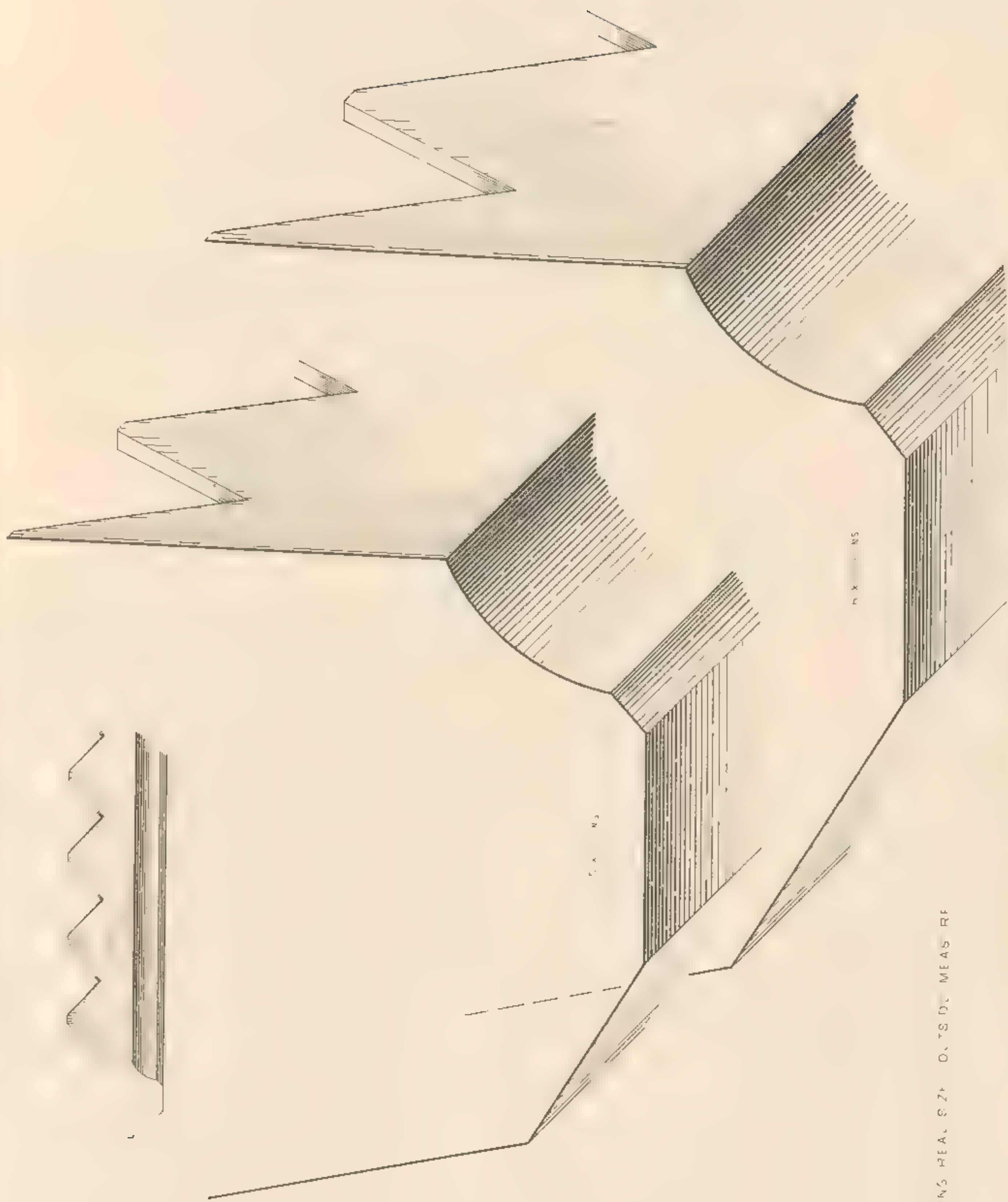
MACFARLANE'S PATENT NO 70 ORNAMENTAL FIGURED GUTTERS



PATENT

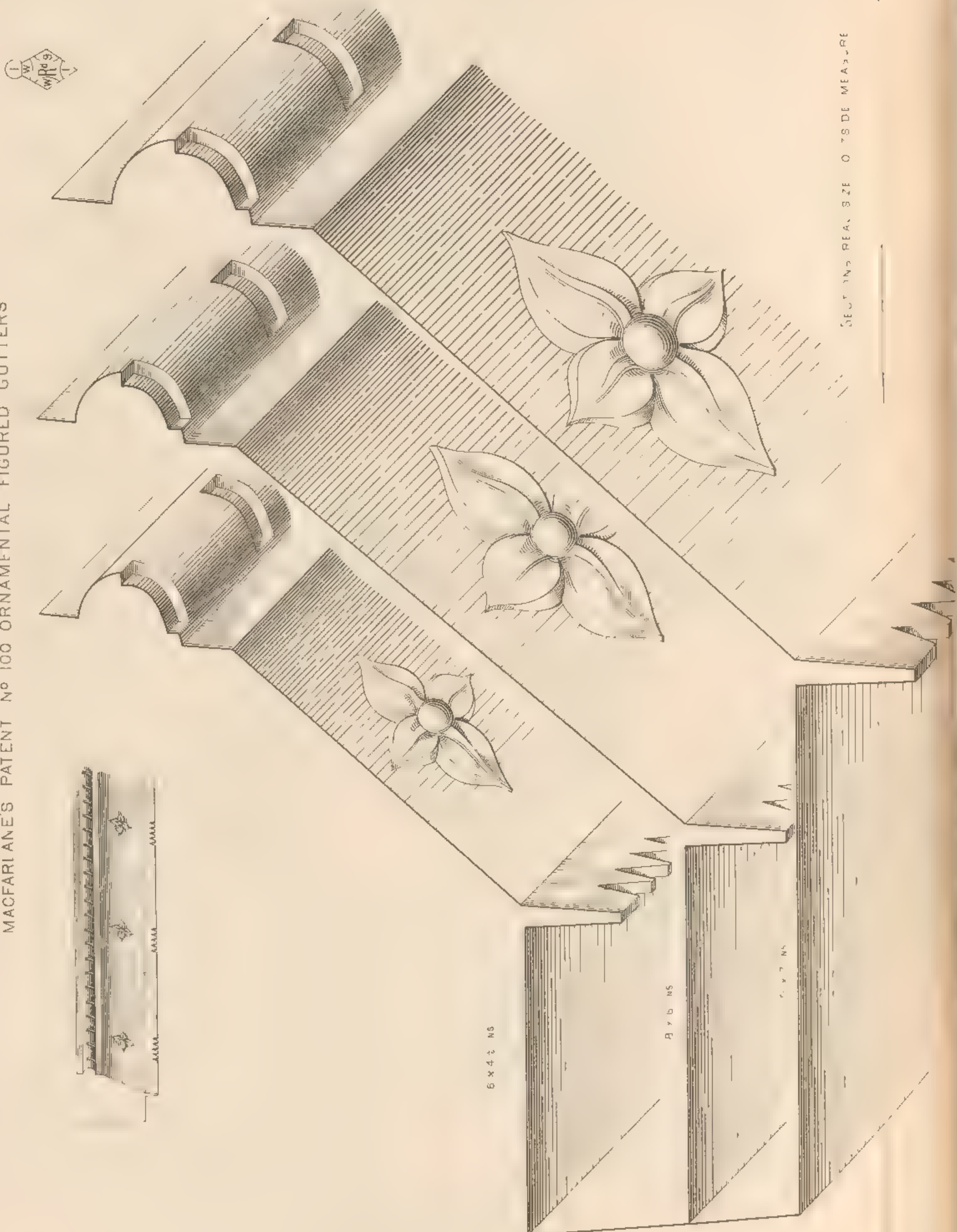
[illegible]

MA'AR, AVE S PATENT NO 99 J. P. AVENTAL FIGURED GUTTERS



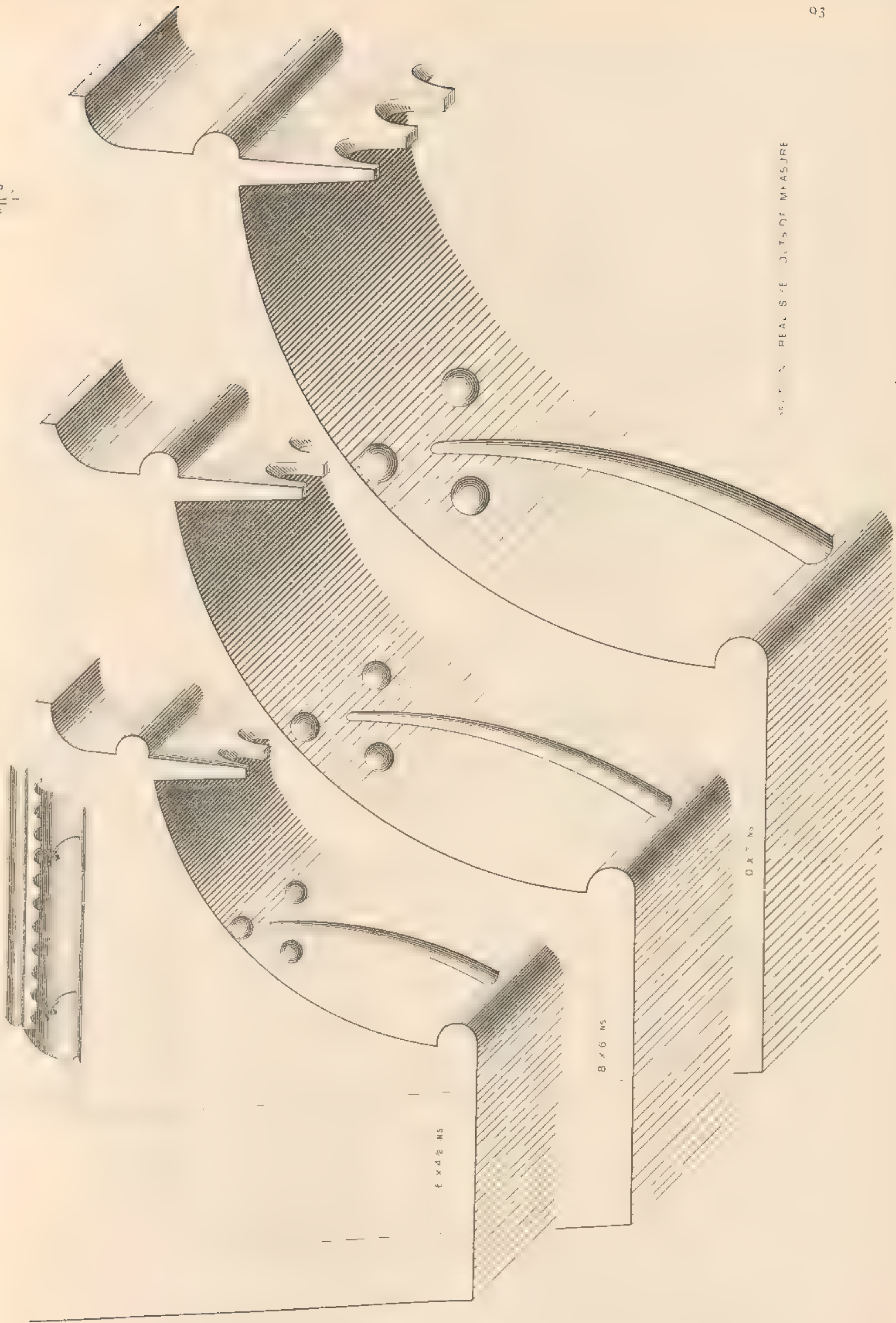
OF THE INSIDE AND OUTSIDE MEASUREMENTS

MACFARLANE'S PATENT NO 100 ORNAMENTAL FIGURED GUTTERS

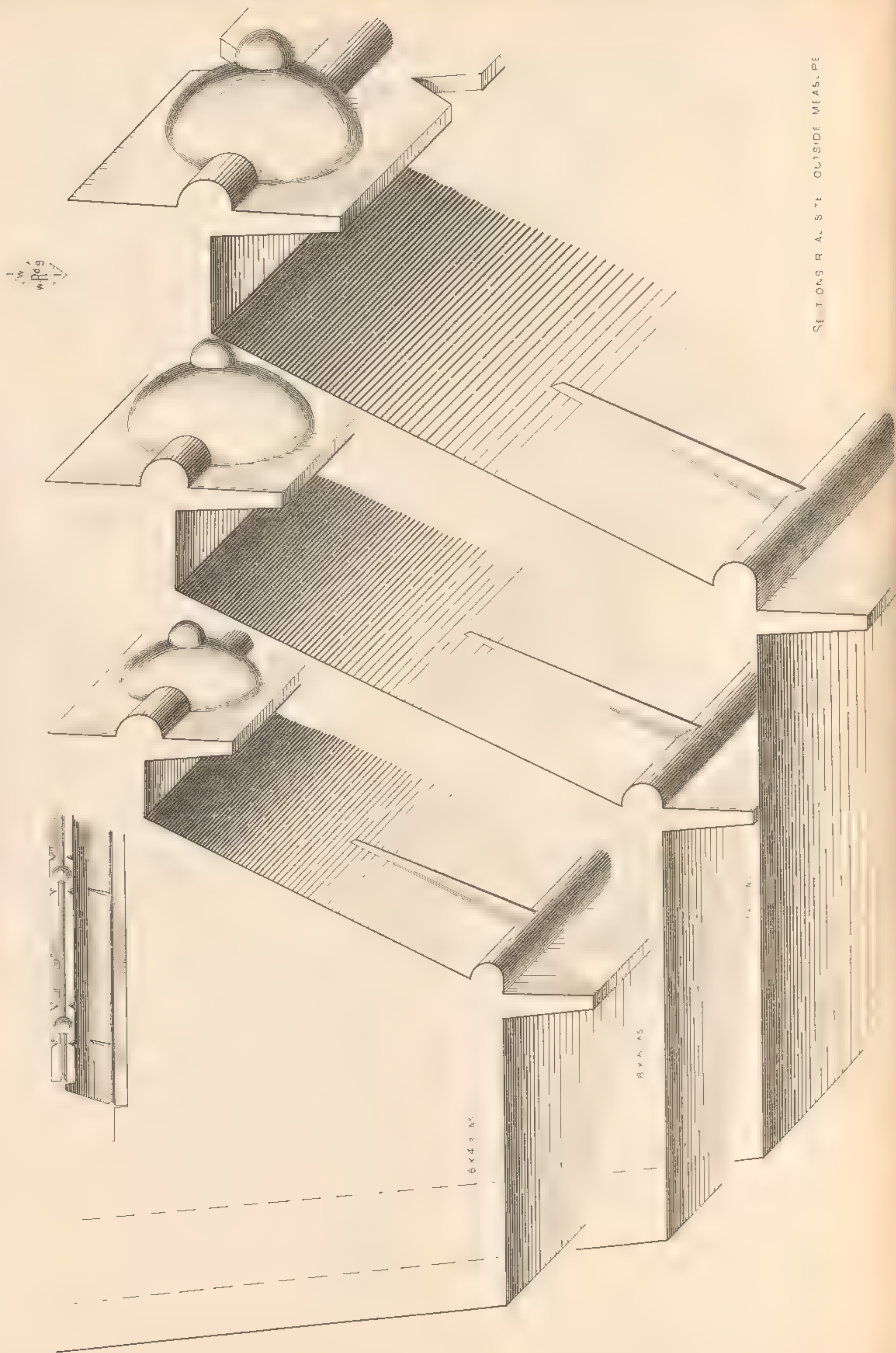


W
R
d
g

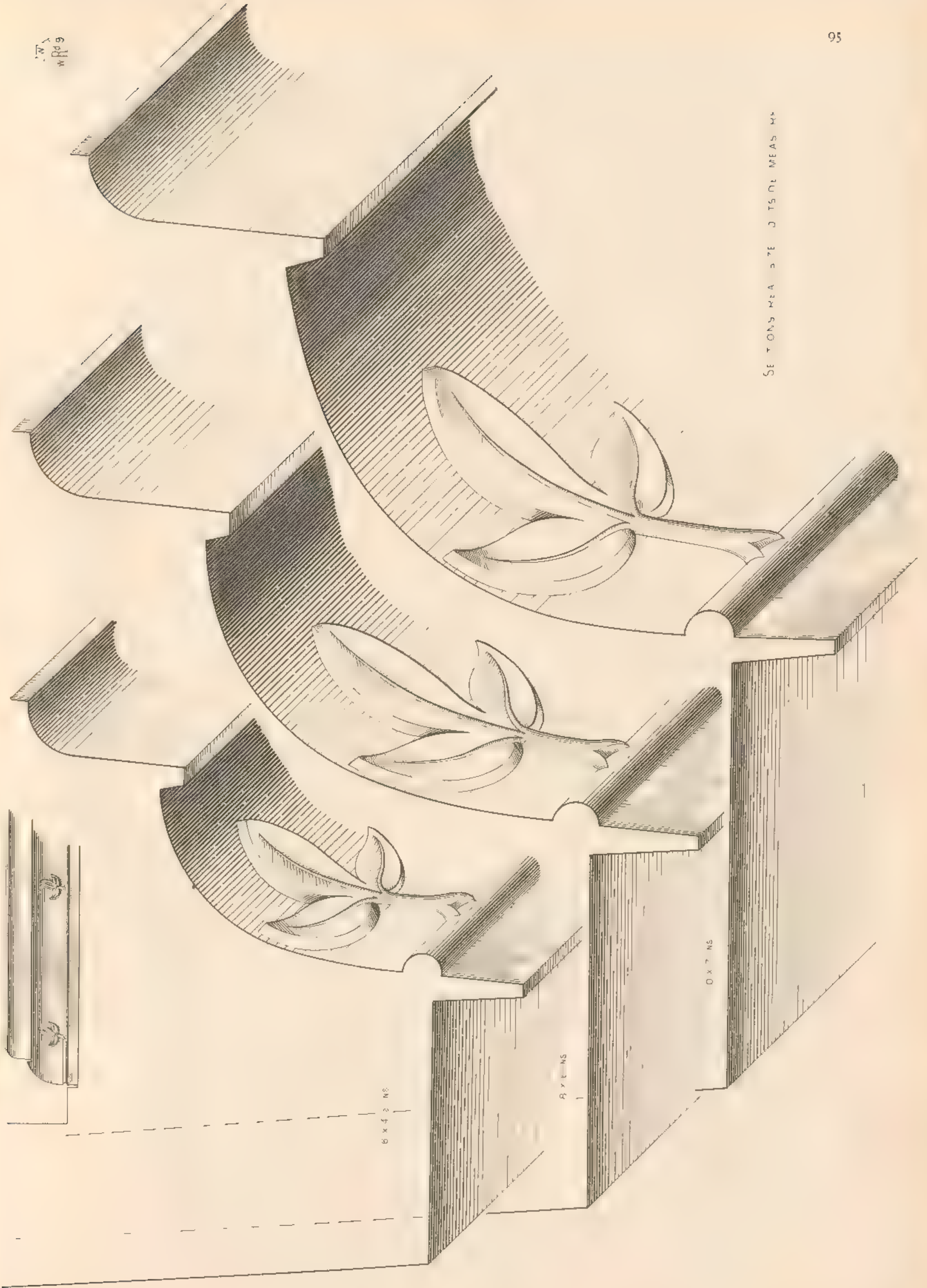
NOT A REAL SIZE BUT OF MEASURE



MACH'BAN'S PALETTE, 32 GENAINE, TA. 10, 100 TERS

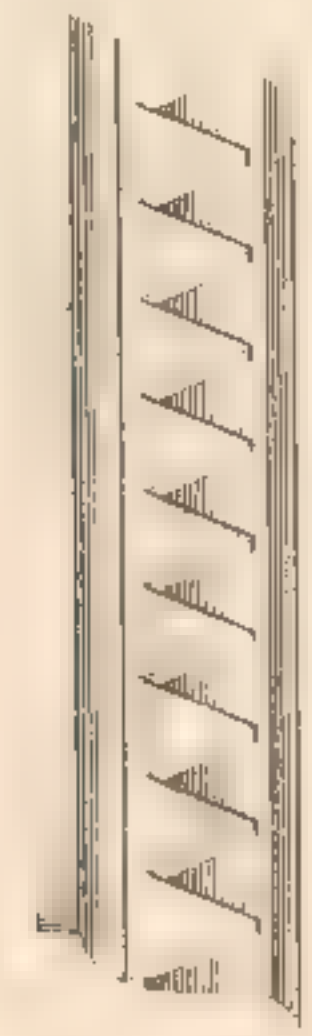


SEE TOWNSHIP AT S-F OULSIDE MEAS. BE



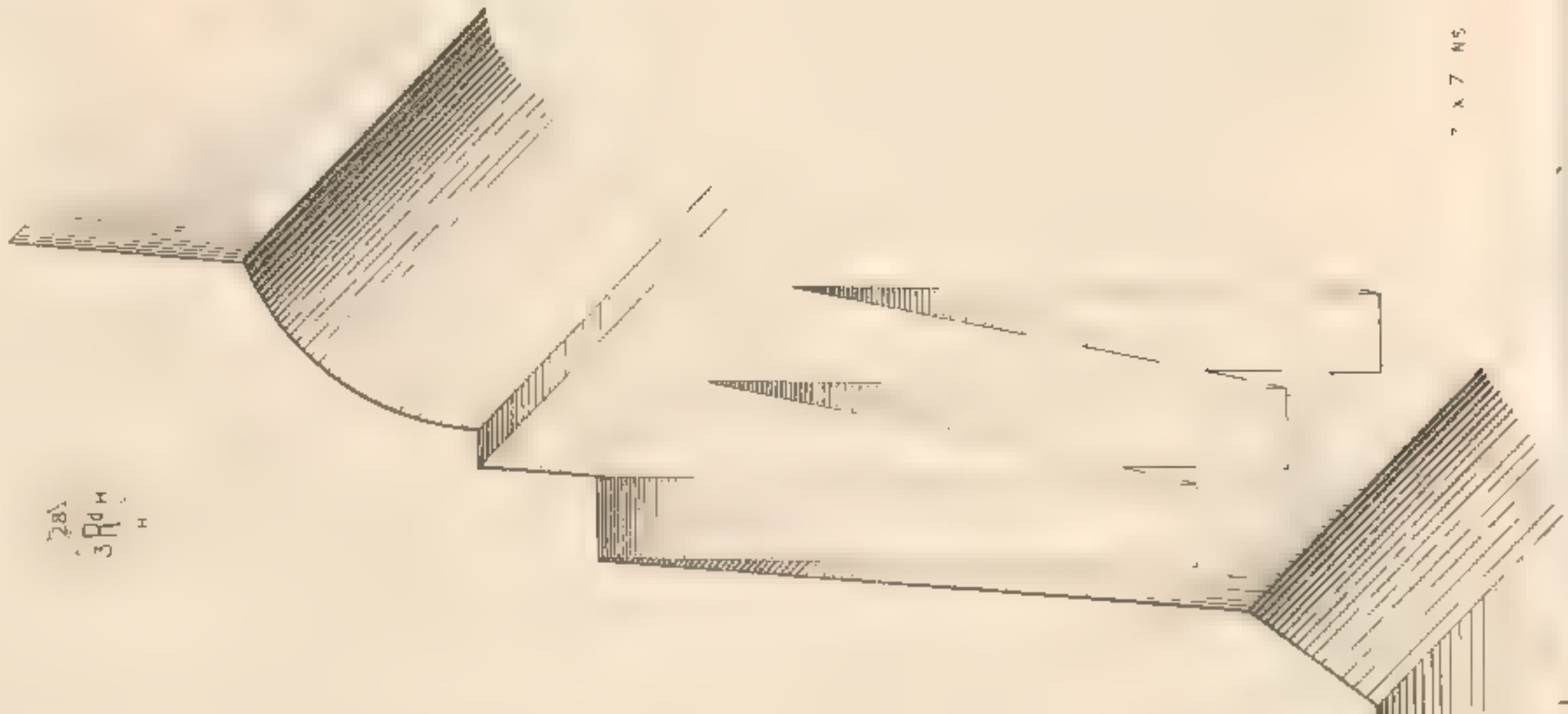
W. A. R. 9

MACFARLANE'S PATENT NO. 15 ORNAMENTAL FIGURED GUTTERS

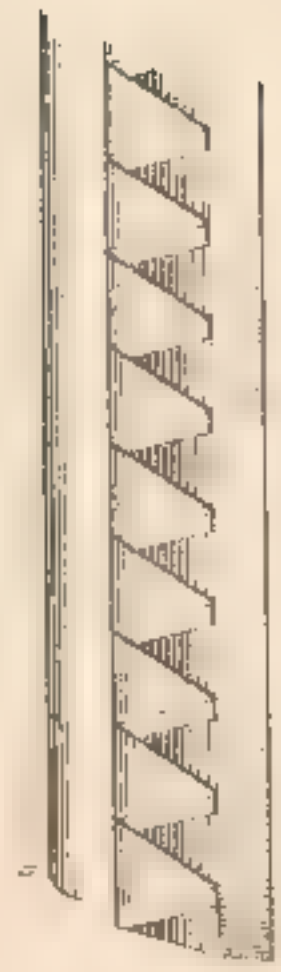


4 X 6 IN.

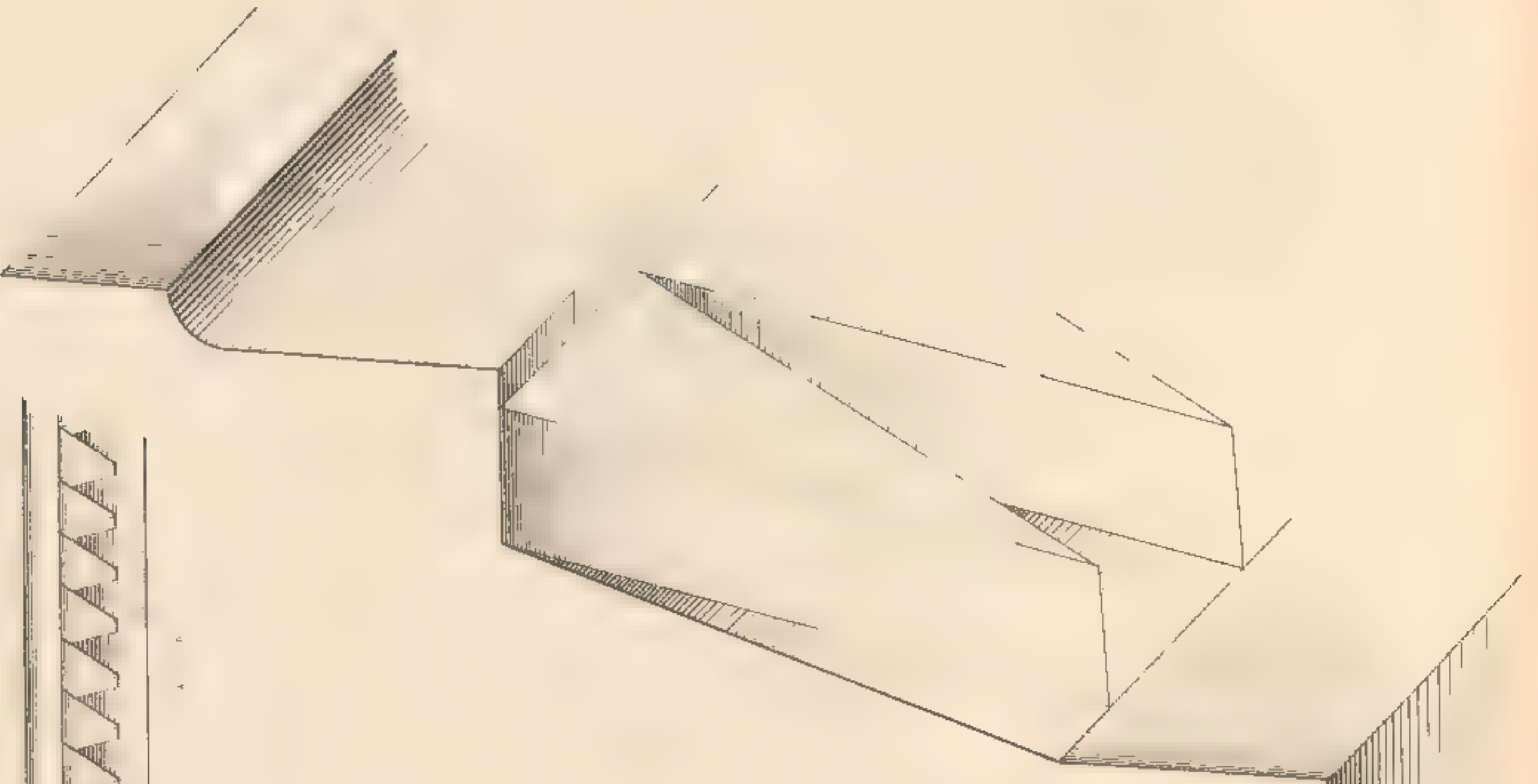
28A
3 R^d H



4 X 6 IN.



A 1



4 X 7 IN.

SEE FIG. 1 FOR MEASUREMENTS

MACFARLANE'S PATENT CIRCULAR GUTTERS

With the view of making our Gutter Section as complete as possible we have introduced the following patterns and sizes of Circular Gutters, and we can supply them to fit the smallest turret, as well as the largest description of circular building. They correspond in pattern with the same Nos. of our Straight Gutters. The same Ornamentations, Brackets, and Connections are suitable for both kinds.

No 2



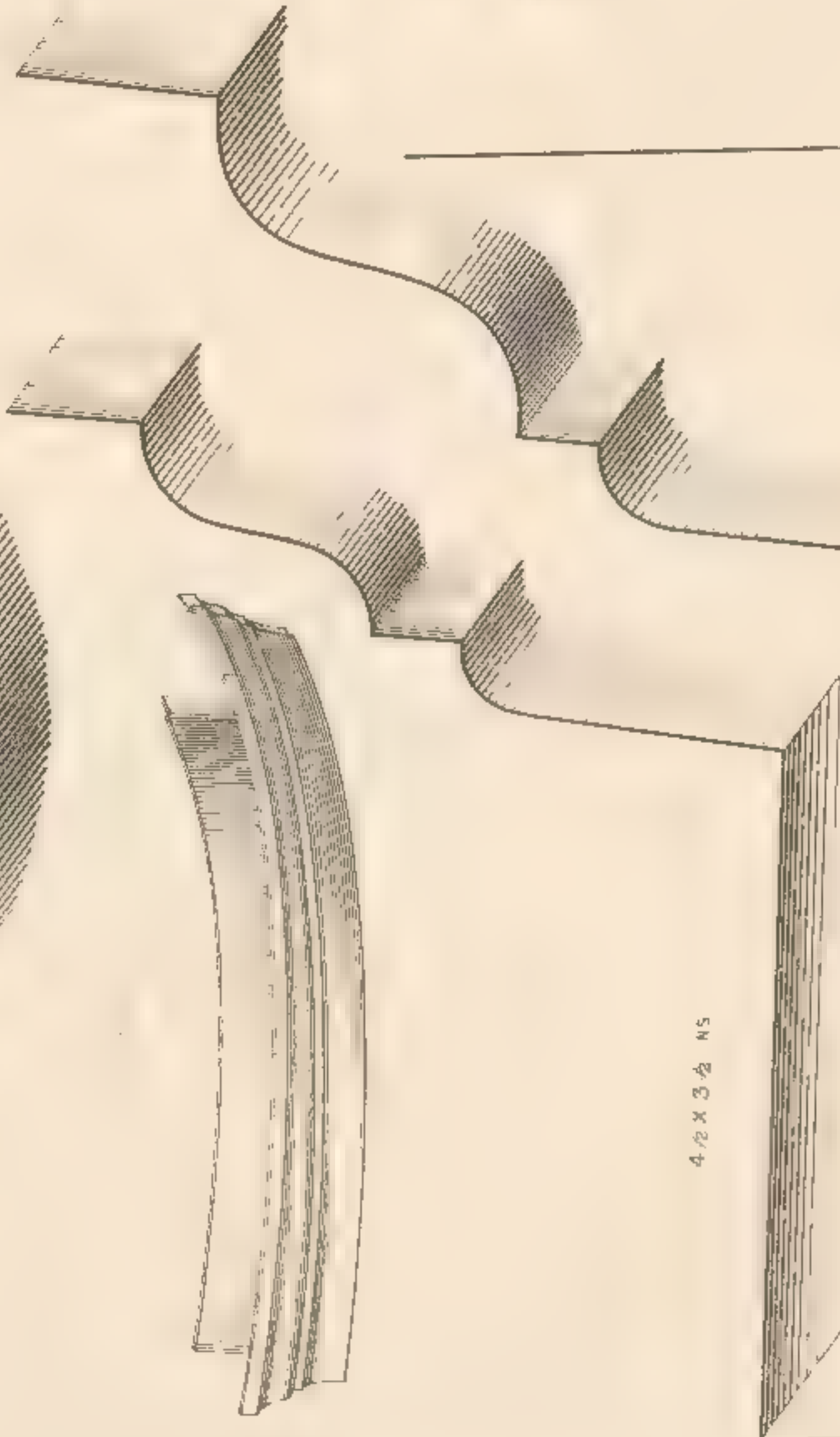
1 to 4 NS



5 x 2 3/4 NS



4 1/2 x 3 1/2 NS



6 x 4 1/2 NS

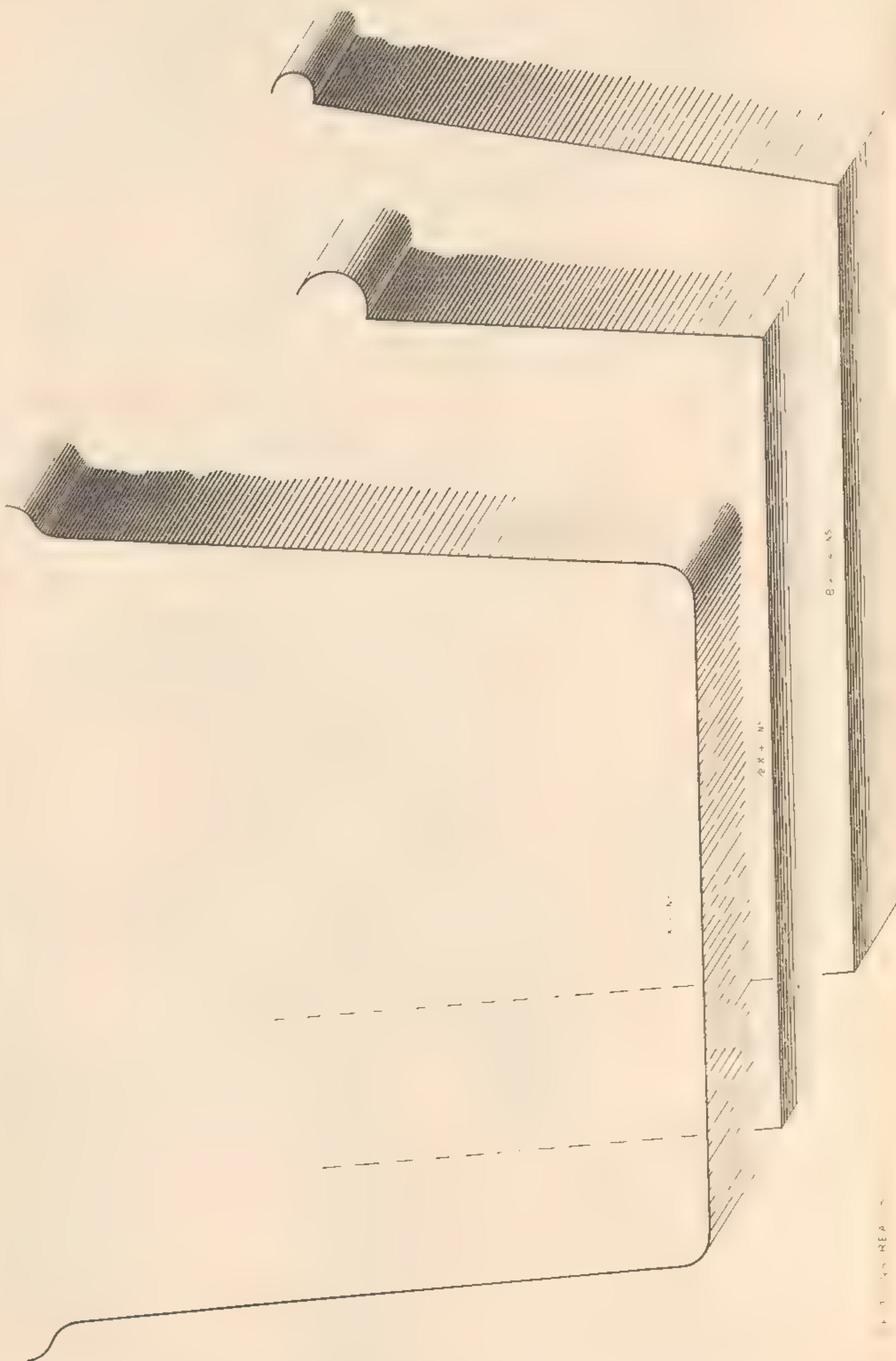


6 x 4 1/2 NS



6 x 4 1/2 NS

MACFARLANE'S PATENT NO 18 BOUNDARY WALL GUTTERS



MACFARLANE'S PATENT NO 18 BOUNDARY WALL GUTTERS

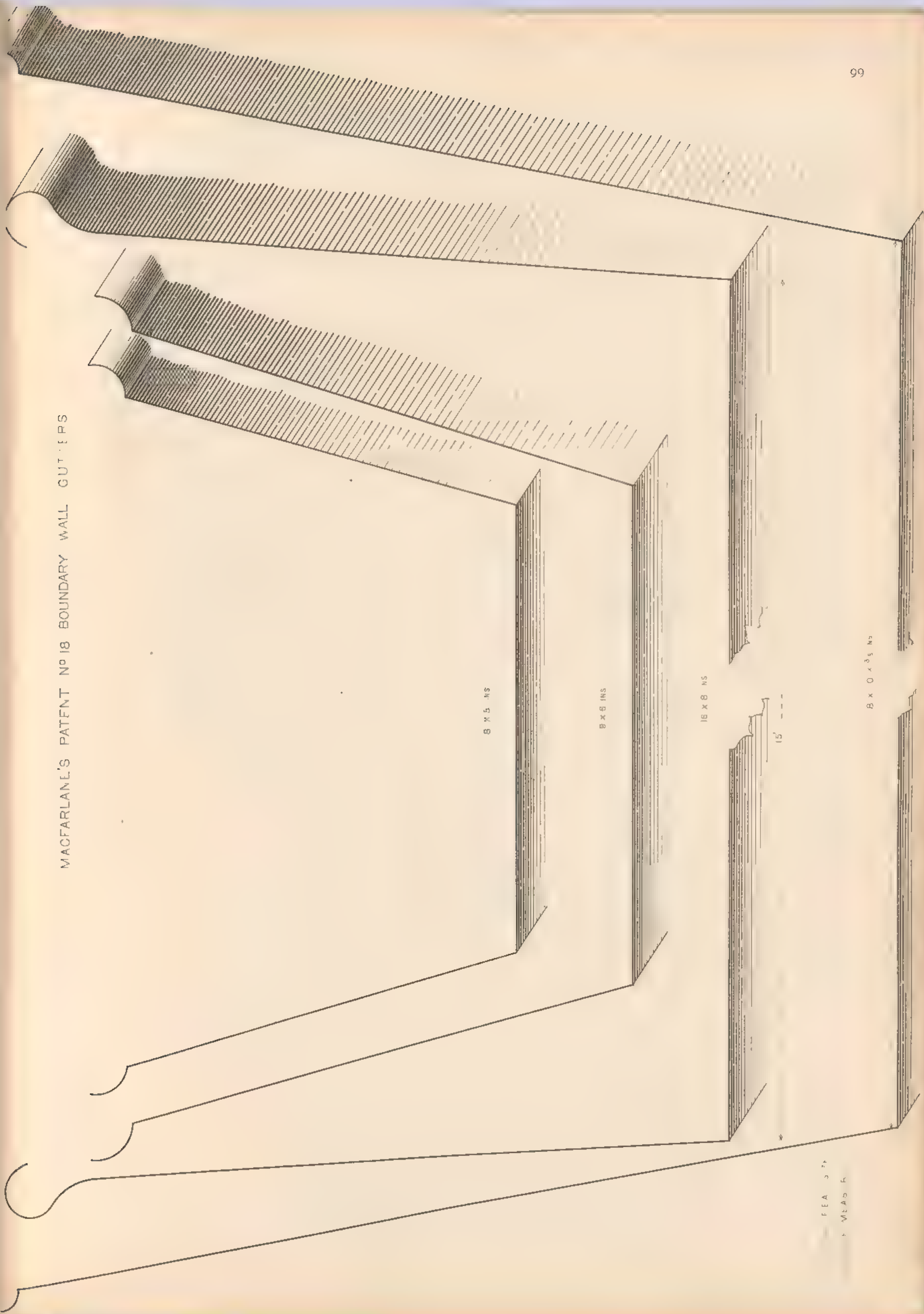
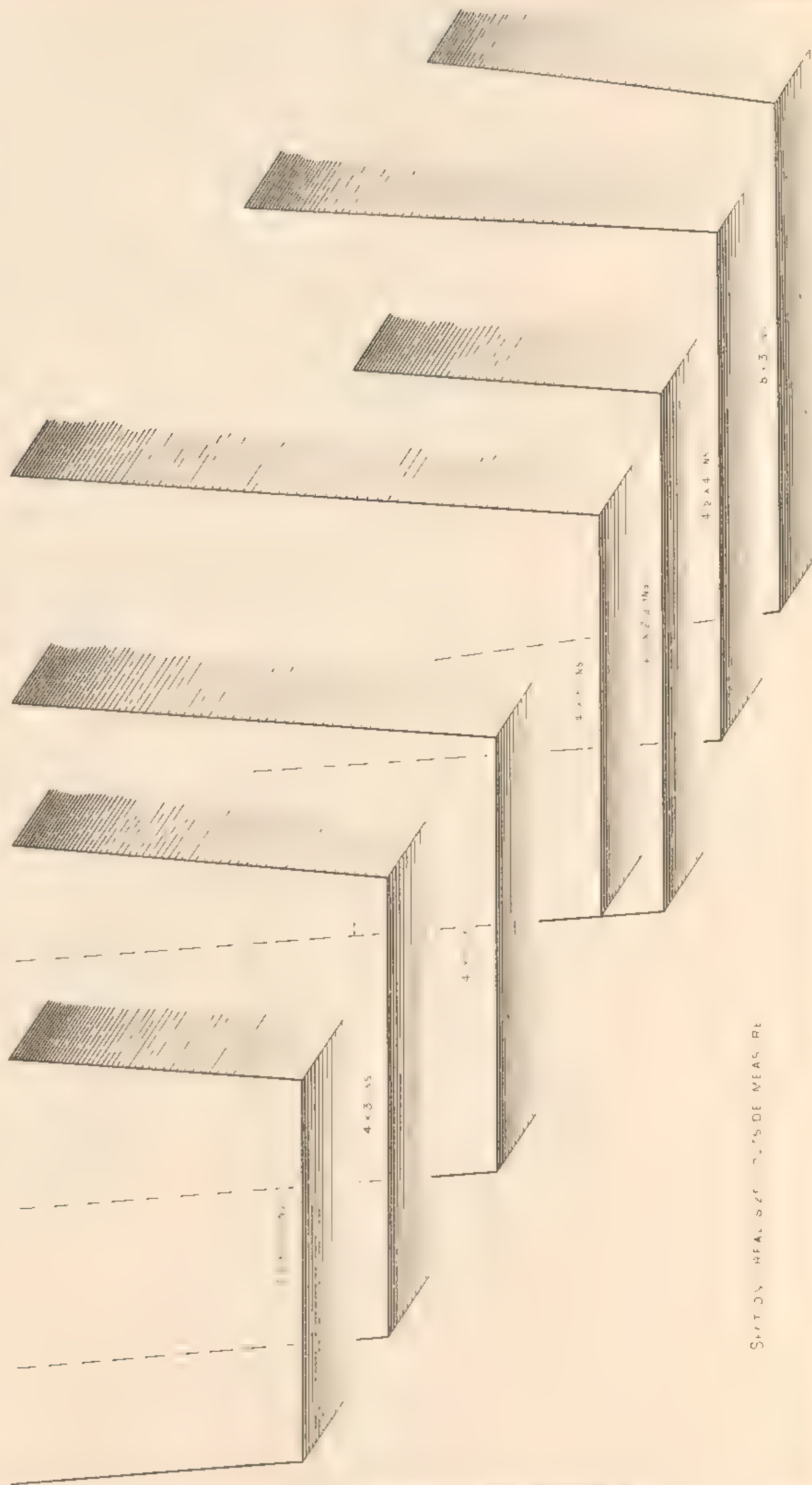


FIG. 3
MEAS. R.

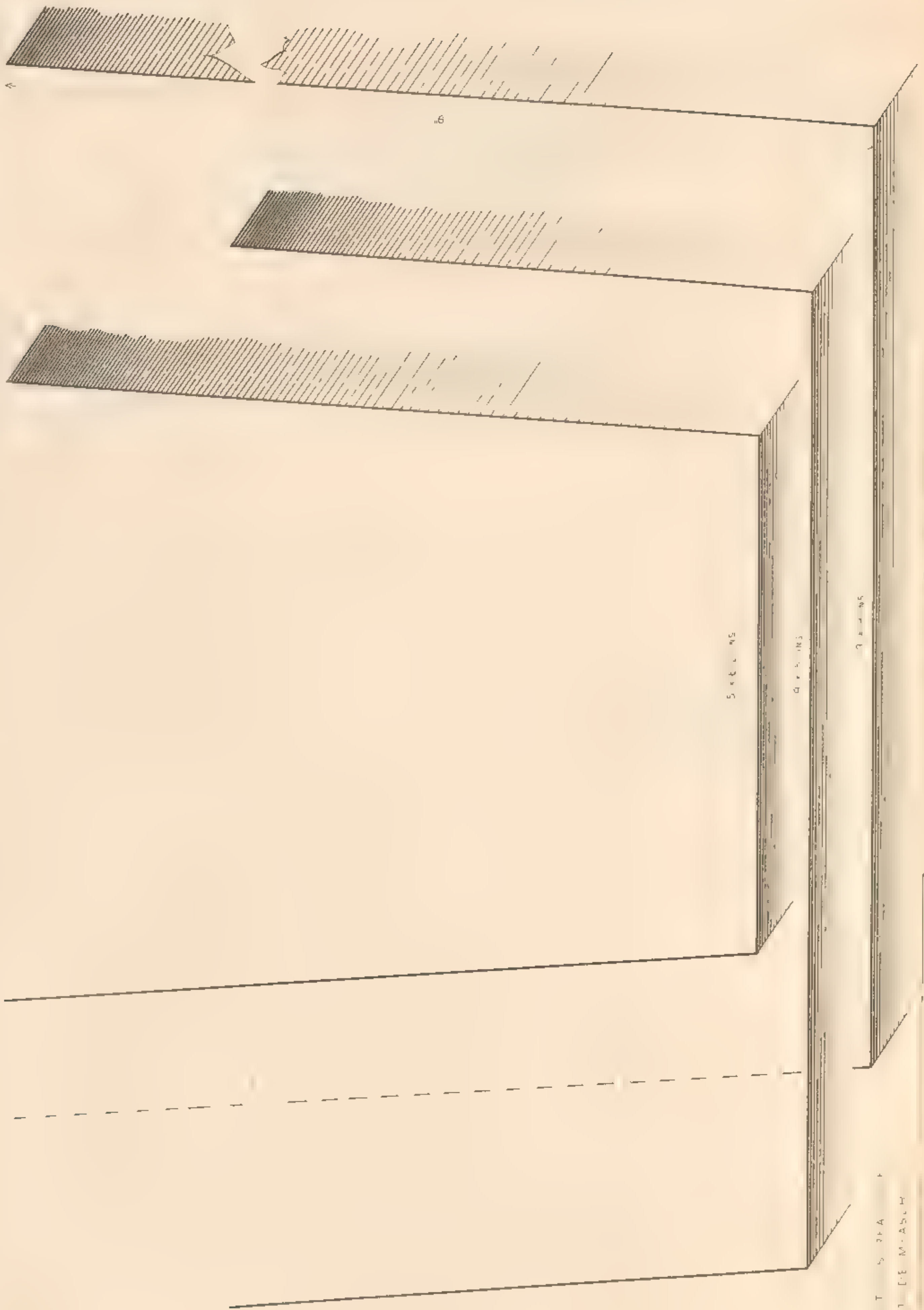


STREET, 145 DE MEAS RE

[illegible]

SECTIONS REAL SIZE OUTSIDE MEAS. RE

MACFARLANE'S PATENT NO 25 BOUNDARY WALL GUTTERS



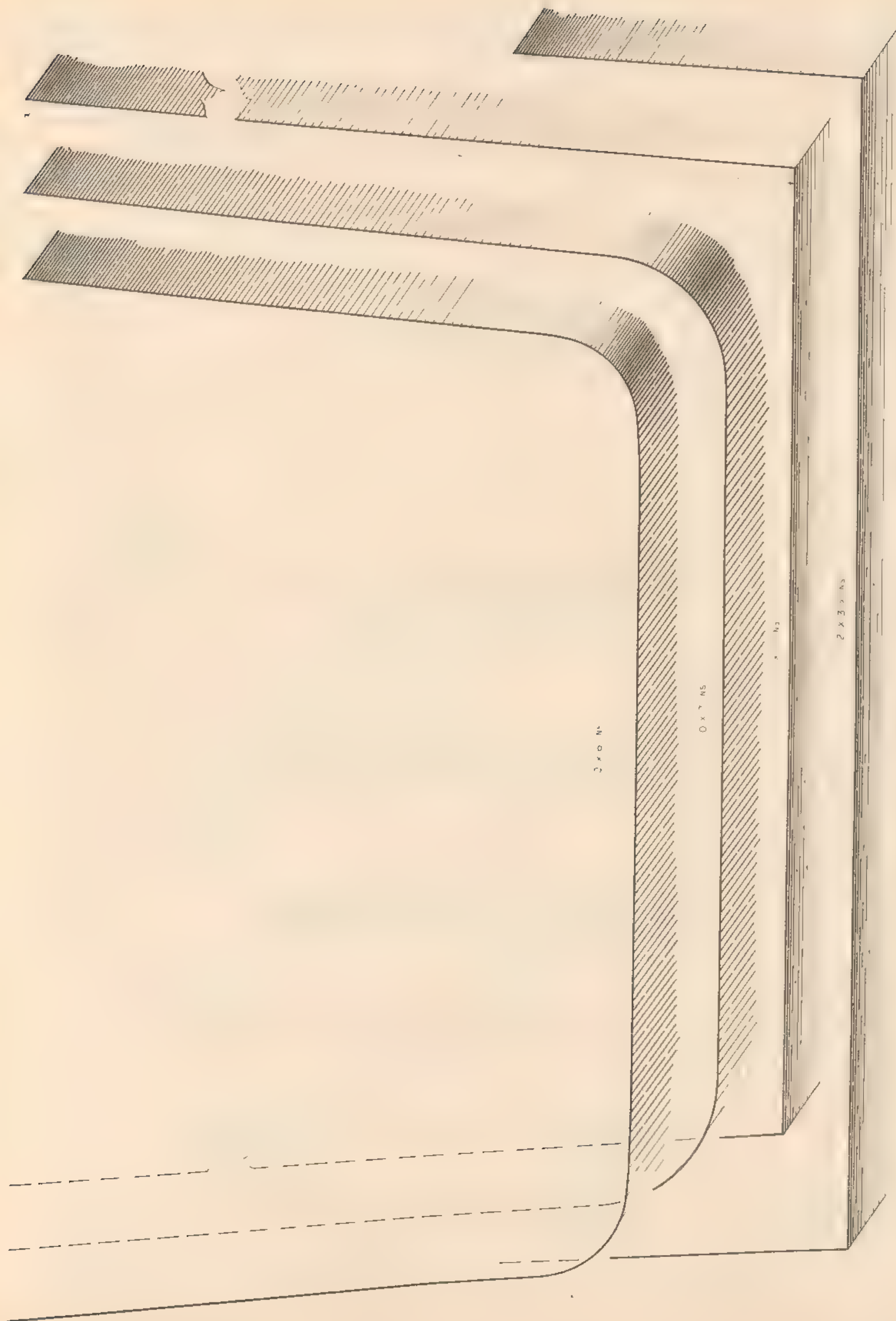
ST. JOHN
J. E. M. A. S. W.

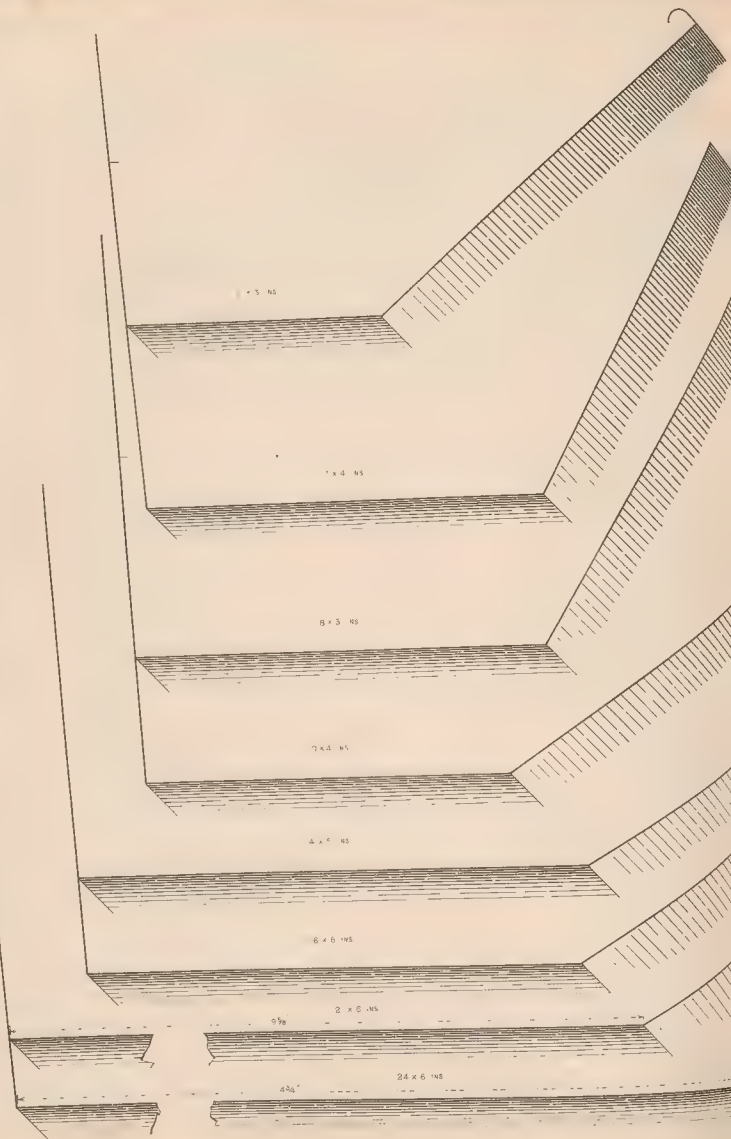
SEE FIGS

SEE FIGS

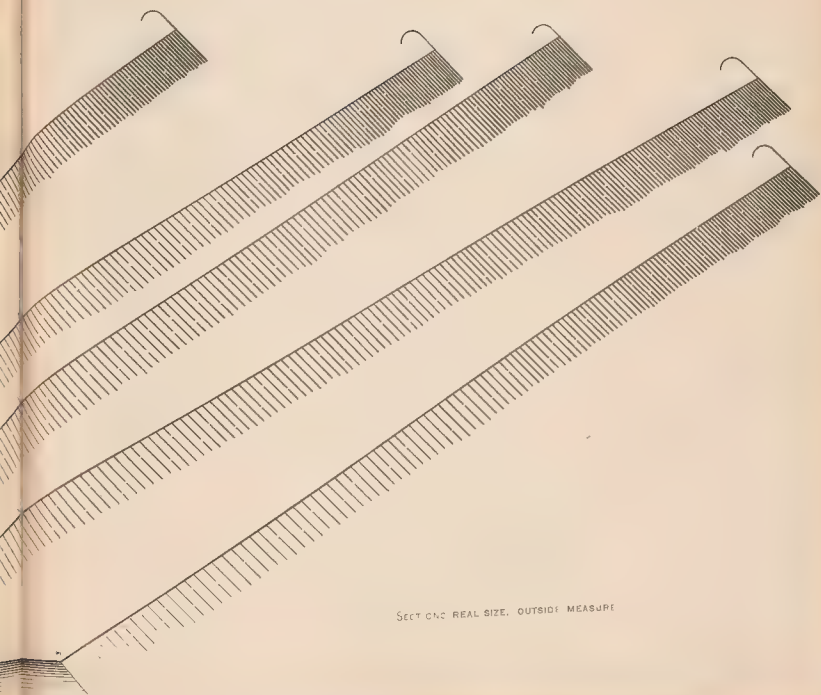
SEE FIGS

6



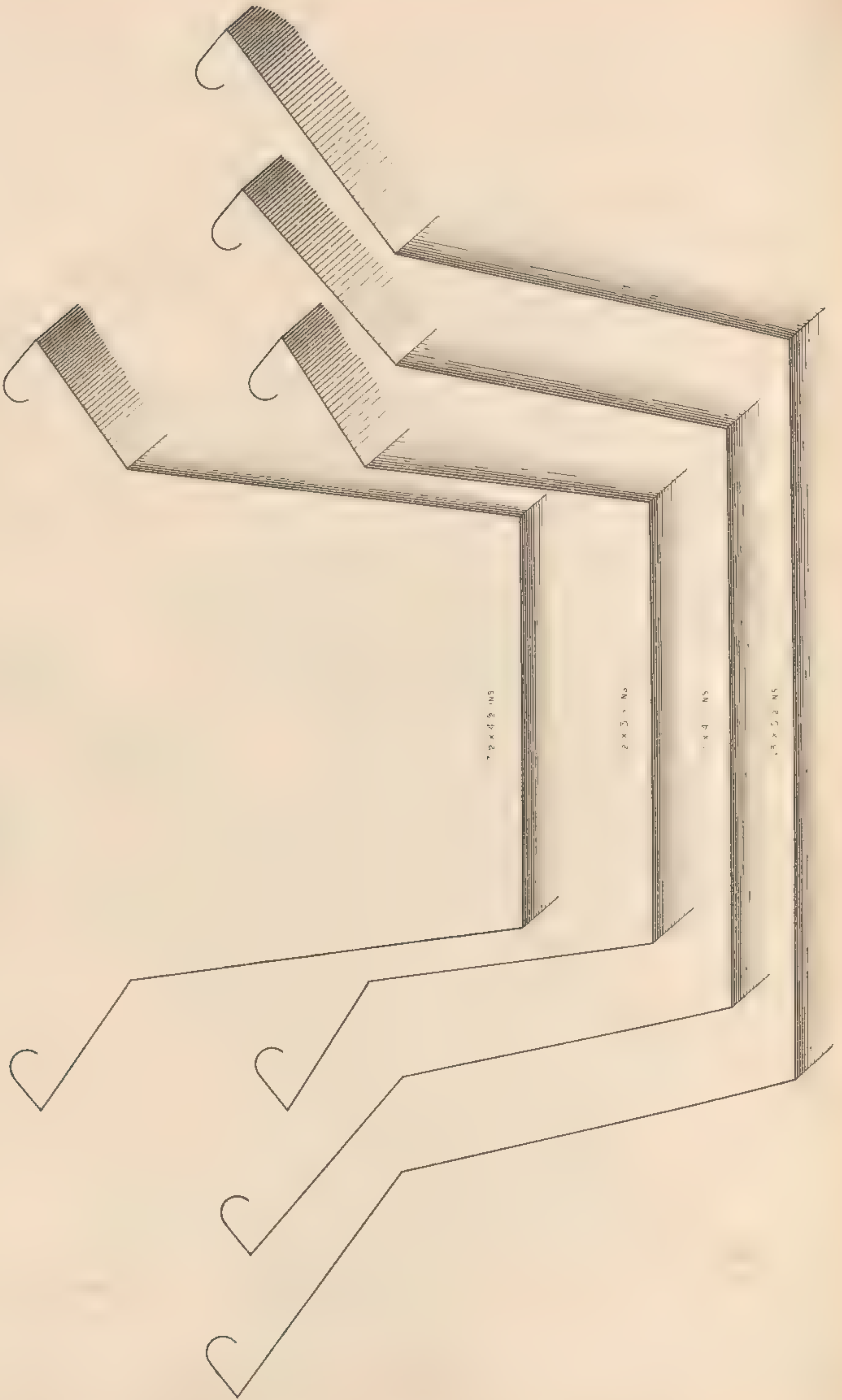


MACFARLANE'S PATENT Nº 28 BOUNDARY WALL GUTTERS.



SECT CNO REAL SIZE. OUTSIDE MEASURE

MACFARLANE'S PATENT NO 19 CENTRE GUTTERS



MACFARLANE'S PATENT NO 20 TAPERED CENTRE GUTTER

107

Each 200 feet of Gutter is tapered from 9 to $6\frac{1}{2}$ ins. in depth ;

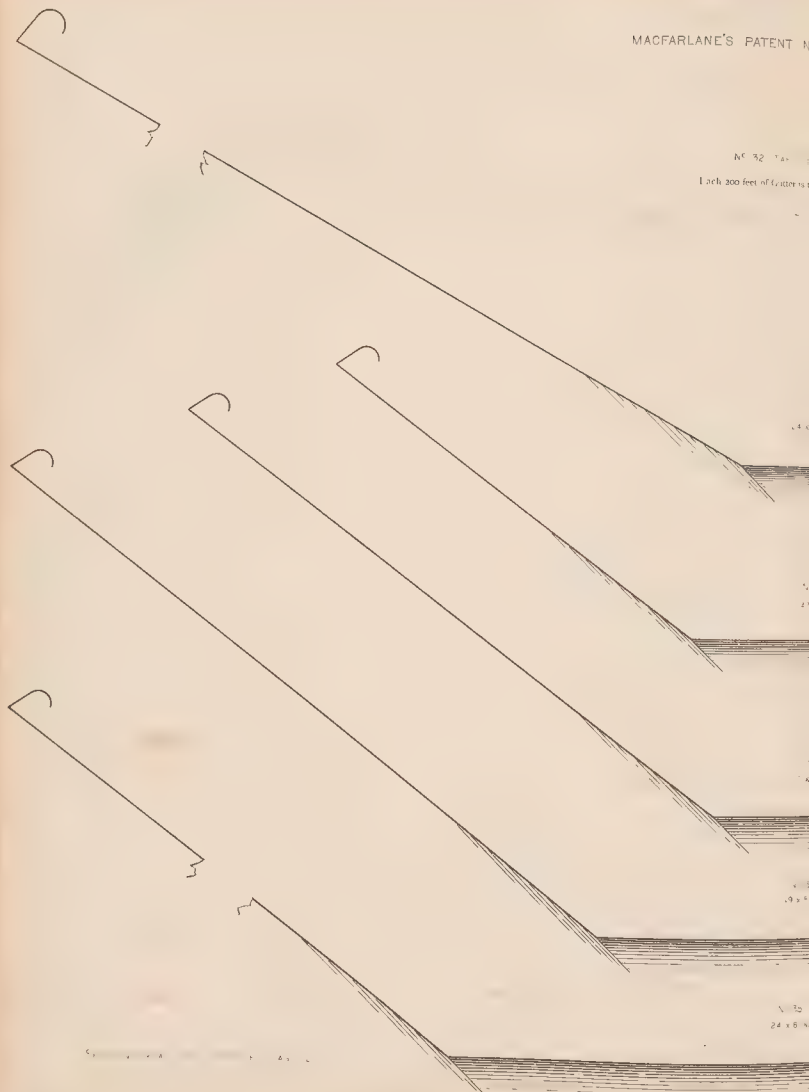
DOWN.

SECTION ON REAL SIZE, OUTSIDE MEASURE



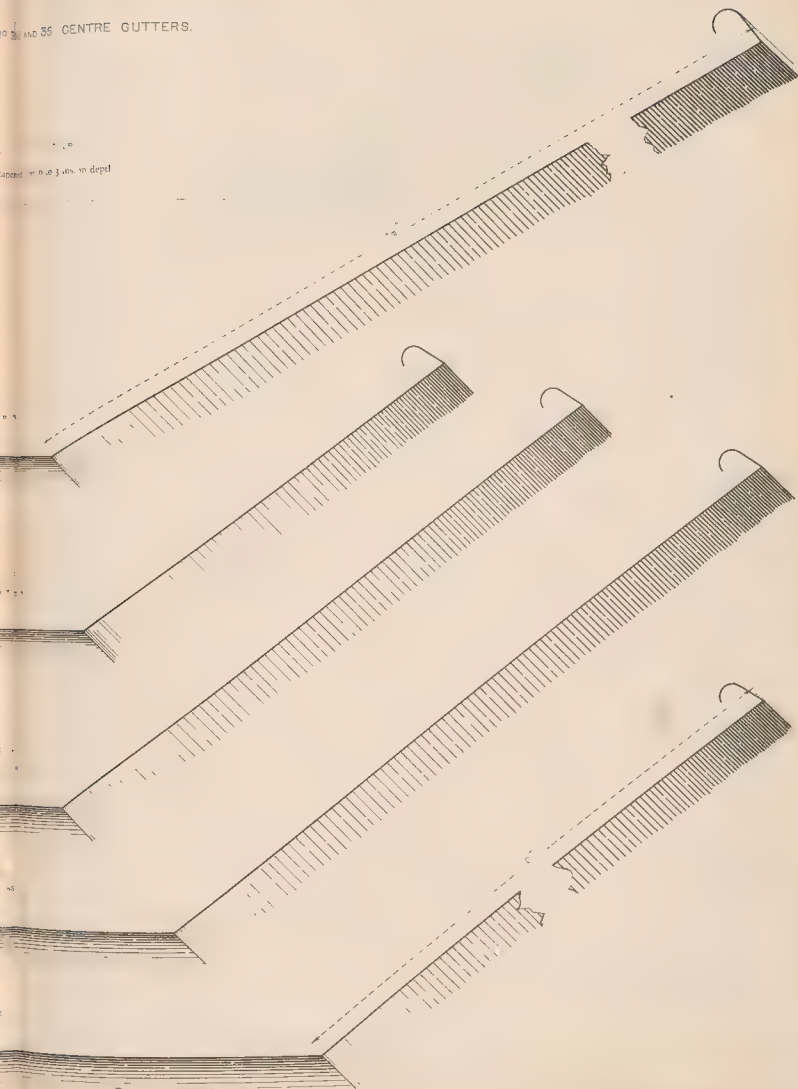
No. 32, 745

Each 300 feet of Center is

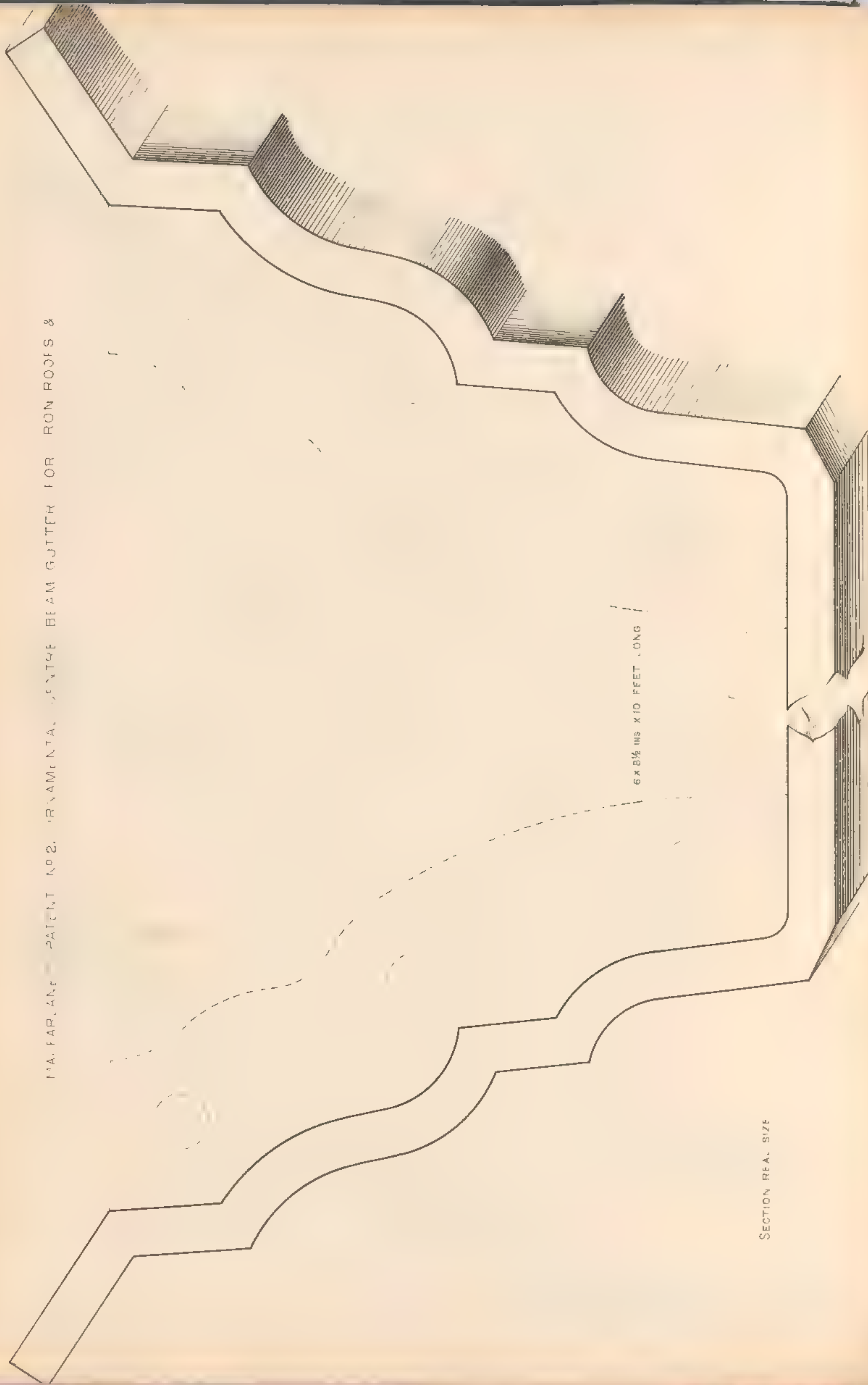


AND 35 CENTRE GUTTERS.

supported in a 3 ins. in depth



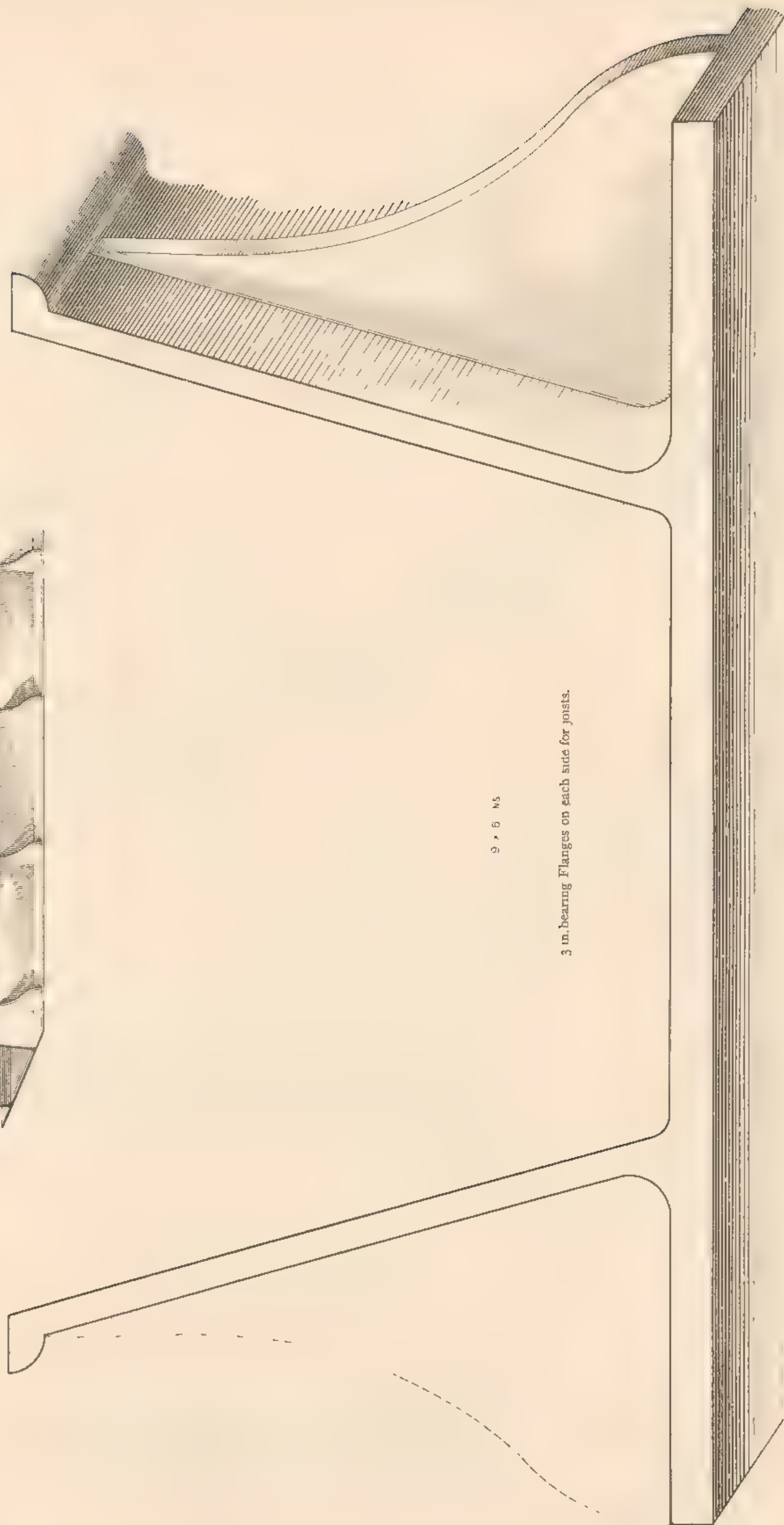
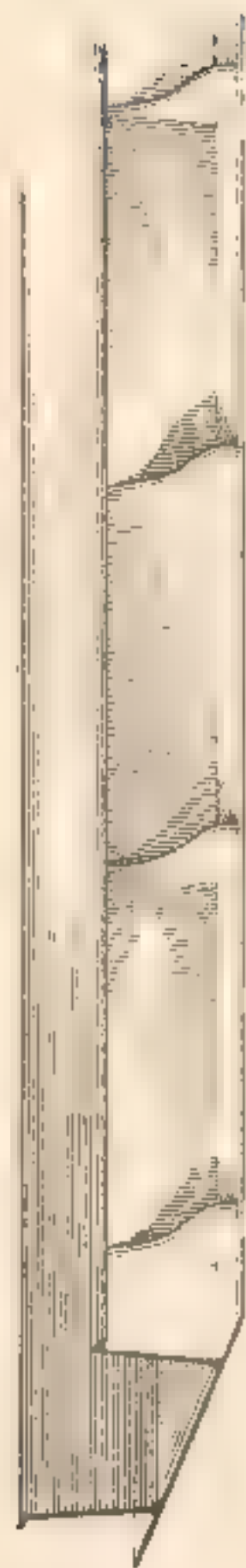
M. A. FARLANE - PATENT NO. 2. ORNAMENTAL CENTRE BEAM GUTTER FOR ROOFS &



6 x 8 1/2 INS X 10 FEET LONG

SECTION REAL SIZE

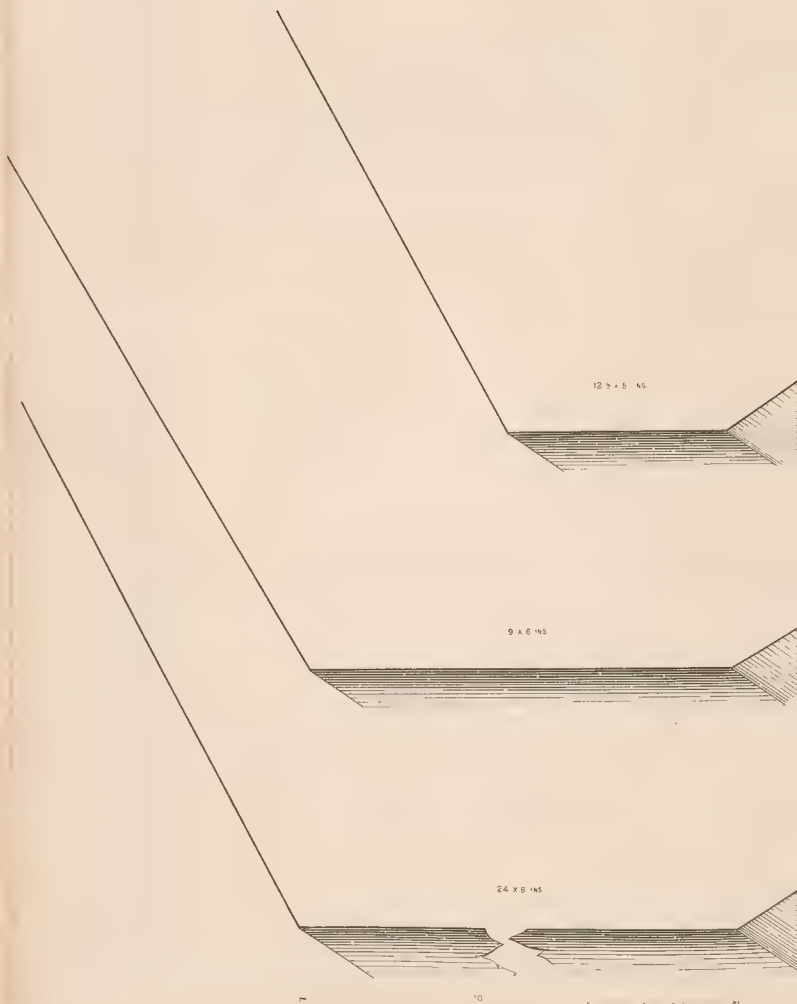
MACFARLANE'S PATENT N° 31 CENTRE GUTTER

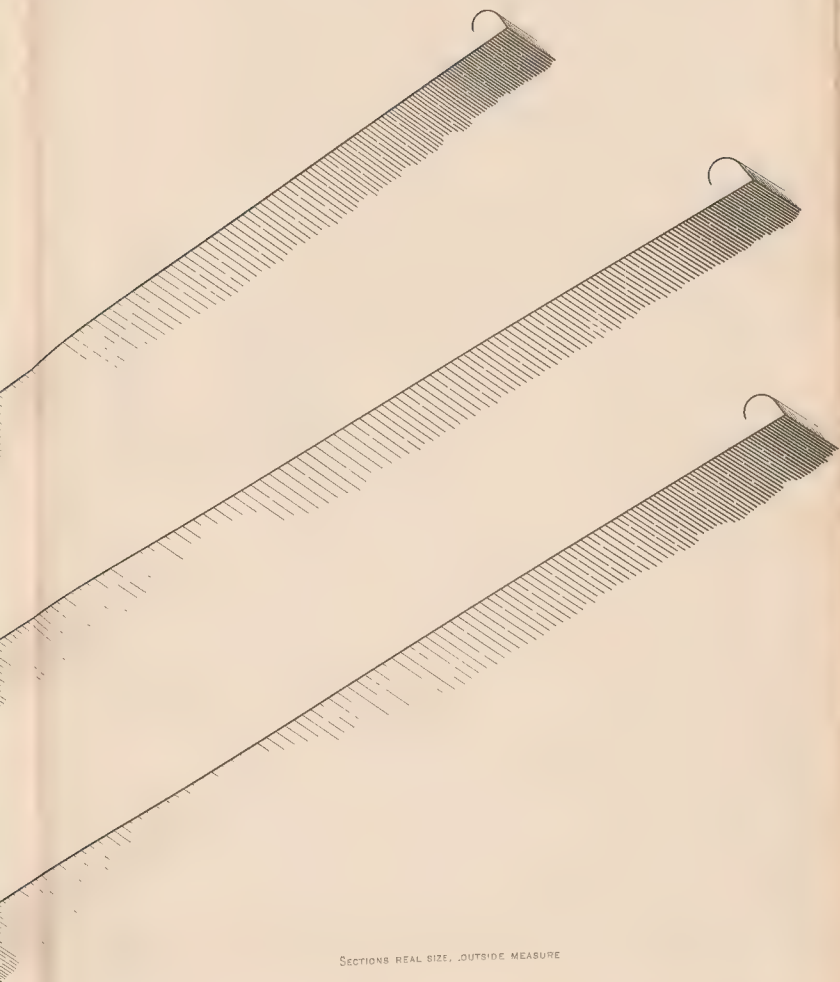


9 x 6 NS

3 in. bearing Flanges on each side for joists.

SECTION REAL SIZE





SECTIONS REAL SIZE, OUTSIDE MEASURE

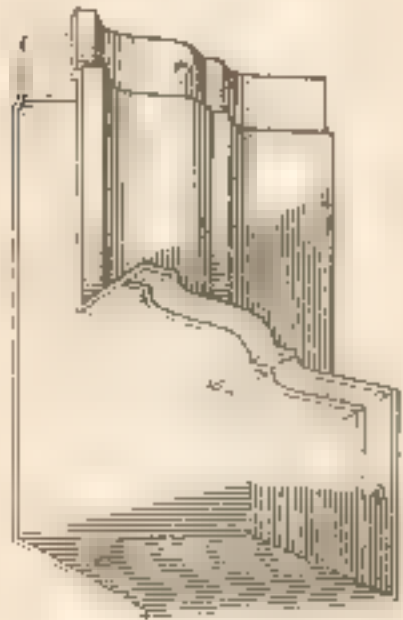
MACFARLANE'S PATENT No 36 CENTRE GUTTERS



MACFARLANE'S PATENT ORNAMENTAL GUTTER CONNECTIONS.

We can supply these for every pattern and size of Gutter in our Catalogue.

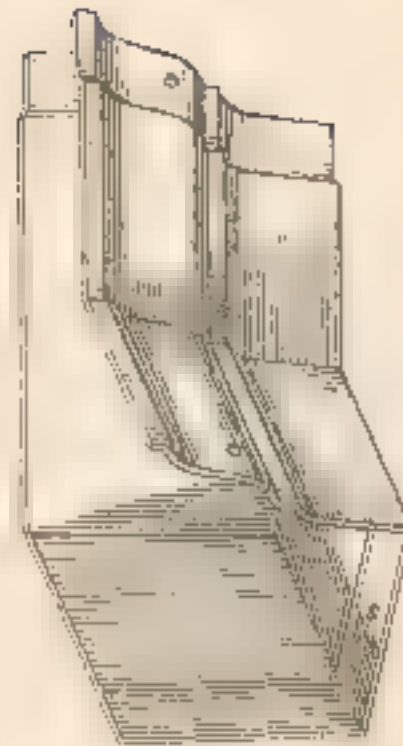
INTERNAL ANGLE



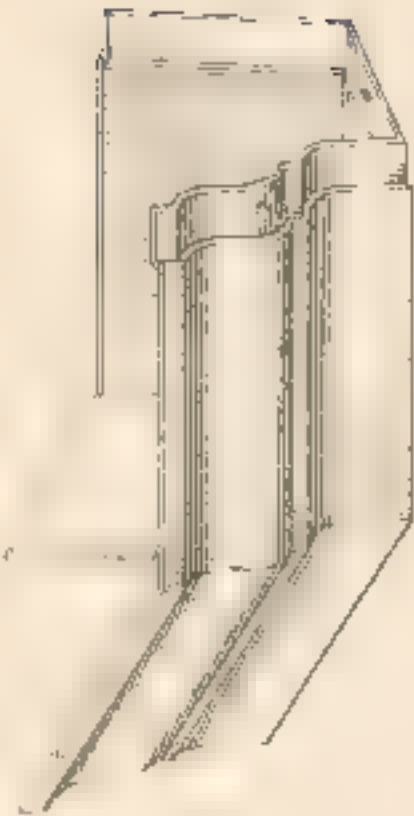
EXTERNAL ANGLE



OBTUSE INTERNAL ANGLE 45°

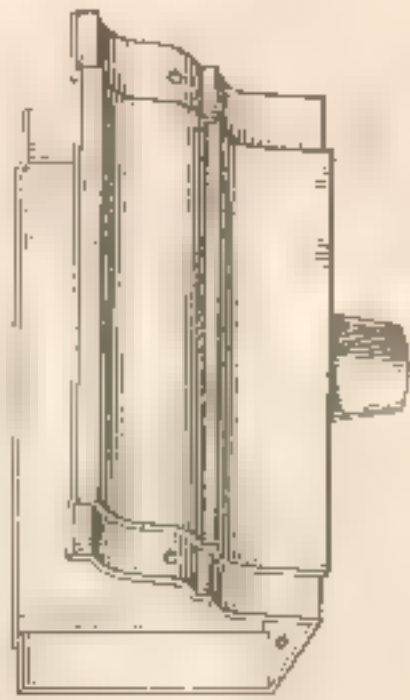


OBTUSE EXTERNAL ANGLE 45°



We make any pattern of Angle for every description of oriel window, and to any particular bevel *to order* on being furnished with the measurements.

NOZZLE PEE



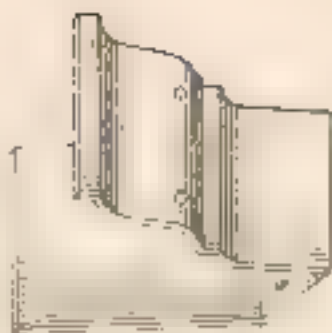
DROP CAST ON BACK



DROP CAST ON CORNER



JN ON CLIP



For joining short pieces of Gutter.

Our Nozzle Pieces have No. 1 Discharge Drops cast on bottom. Drops on back or corner, as shown by the above sections, *to order*.
In ordering, the size and No. of down pipe should always be stated.

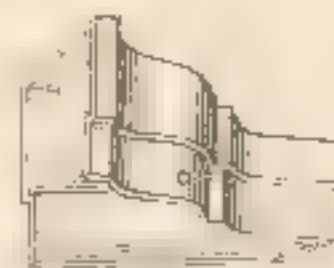
ORNAMENTAL SPIGOT STOP END



ORNAMENTAL FAUCET STOP END



ORNAMENTAL REVERSE STOP END



PLAN SPIGOT STOP END



PLAN FAUCET STOP END



PLAN REVERSE STOP END



Every separate stretch of Gutter should have Ornamental Stop Ends, they add so much to the finished appearance of the gutter cornice. Reverse Stop Ends are only used when the gutters are cut and have no spigot.

SCALE 1 INCH = 1 FOOT

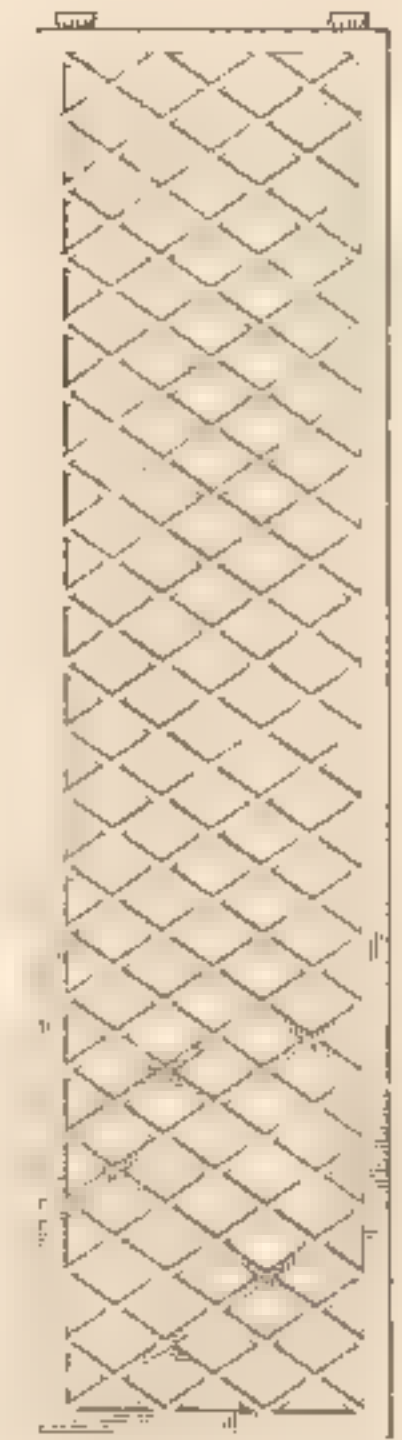
MACFARLANE'S GUTTER GRATES



This essential requisite should be placed over every discharge Drop, for the purpose of preventing the down pipe getting choked. The mode of attaching it to the Gutter is, by firmly embedding the lower end (which is slightly tapered) into the side of the pipe of the Gutter.

The accompanying *Illustrations* show the outside measurement of the various sizes we make. Any other size or form made *to order*.

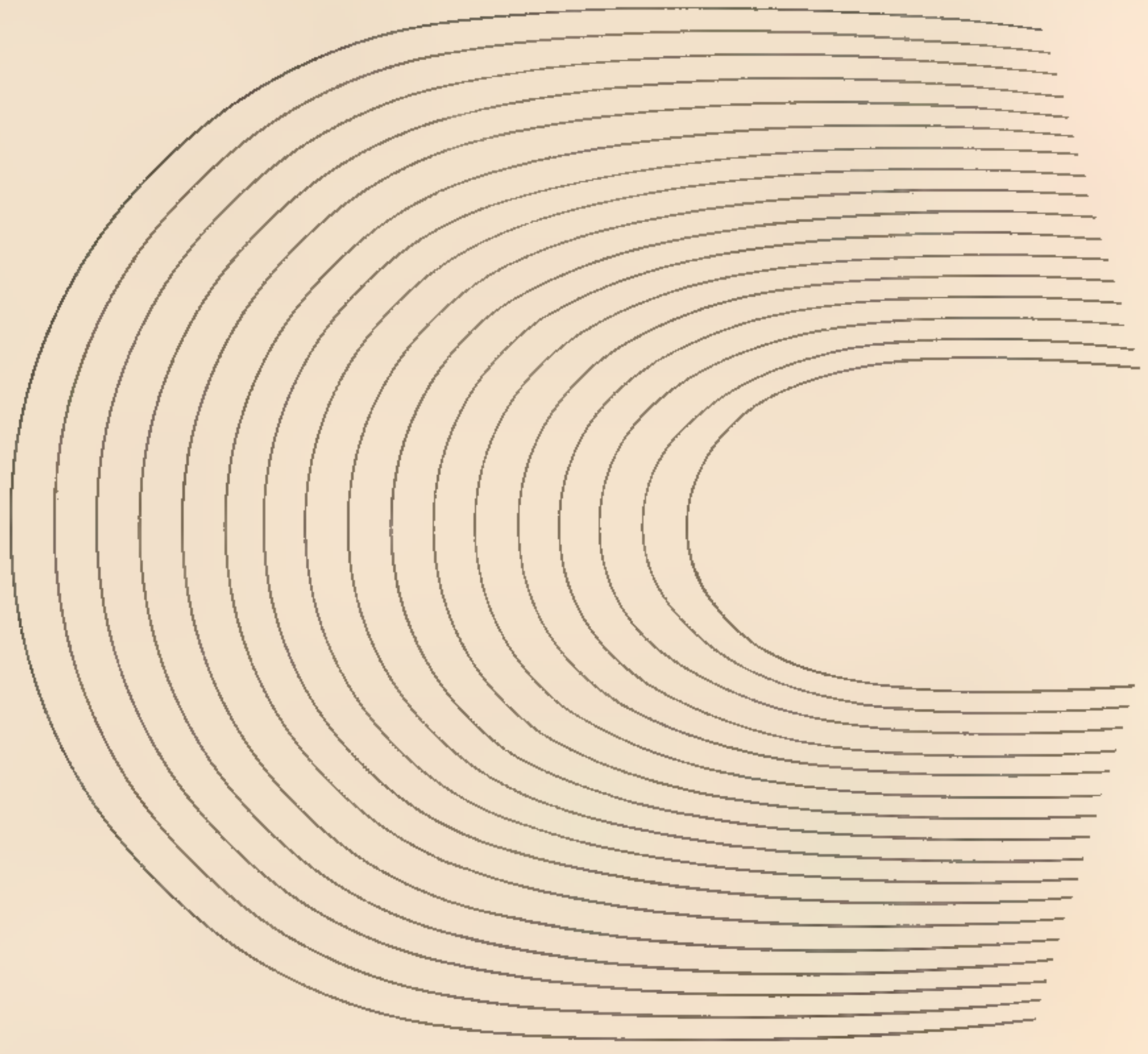
SNOW GRATE



6, 7, 8, 9, 10, 11, 2, 3, 4, 5 AND 16 IN BROAD

This gutter attachment has been introduced by us for the purpose of preventing the gutter getting choked up with snow, and thereby causing the water to overflow its channel and damage the building.

A dovetail at the end of each separate casting joins the whole stretch together into one continuous Grating.



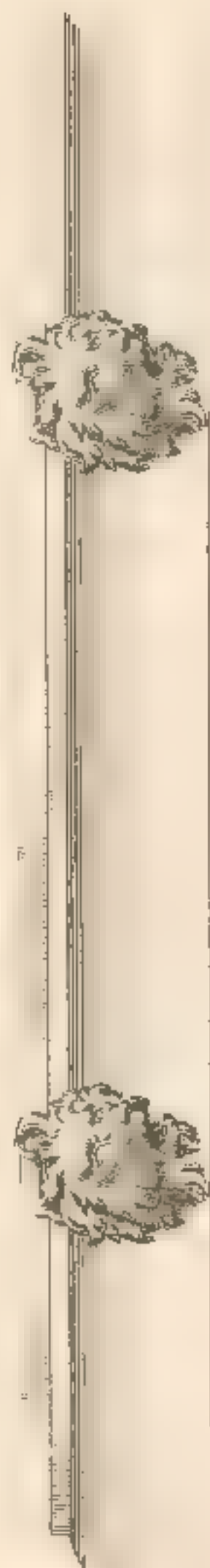
2, 2 1/4, 2 1/2, 2 3/4, 3, 3 1/4, 3 1/2, 3 3/4, 4, 4 1/4, 4 1/2, 4 3/4, 5, 5 1/4, 5 1/2, 5 3/4 AND 6 INS

MACFARLANE'S PATENT

MACFARLANE'S GUTTER ORNAMENTS

These can be attached to any of our Gutters, as shown in the following illustration, the distance between the Ornaments being about 3 feet.

NO. 1. TWO HEADS



4 NS

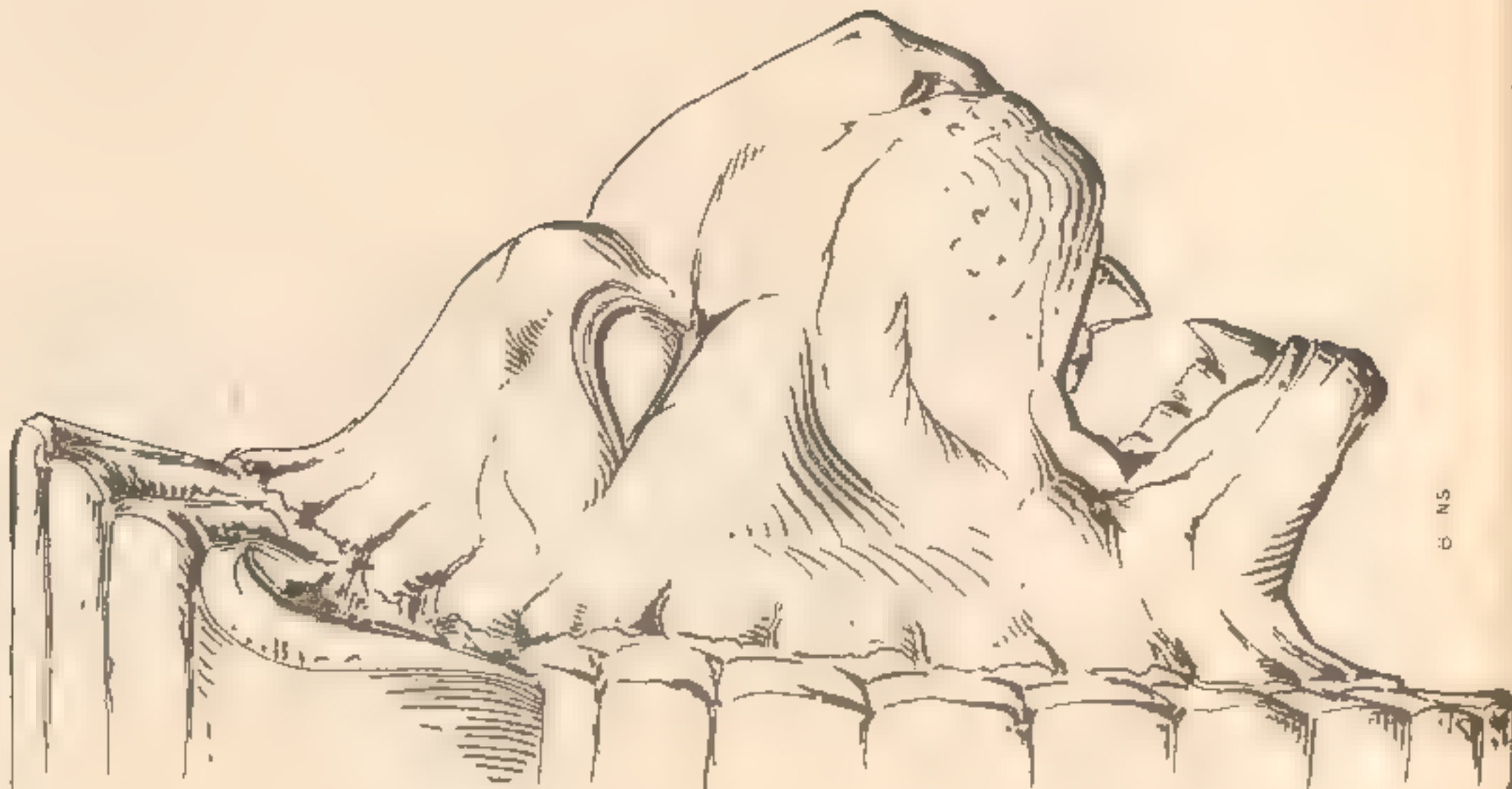


5 NS



6 NS

PLATE 10. THE GREAT PYRAMIDS

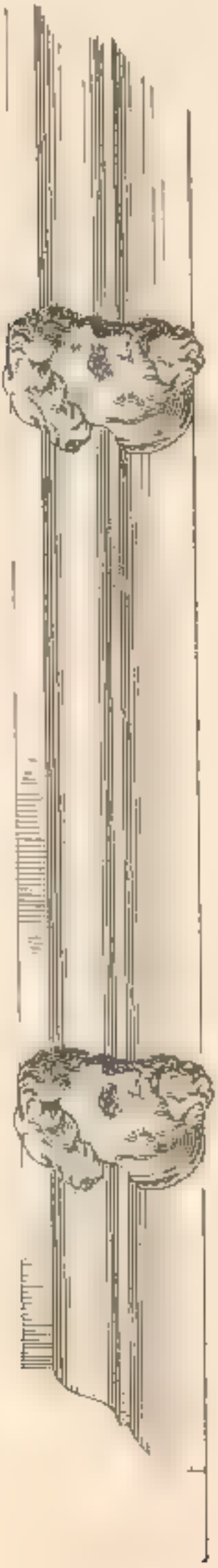


6 NS



MACFARLANE'S GUTTER ORNAMENTS

NO 3 MAN'S HEAD



4 IN.



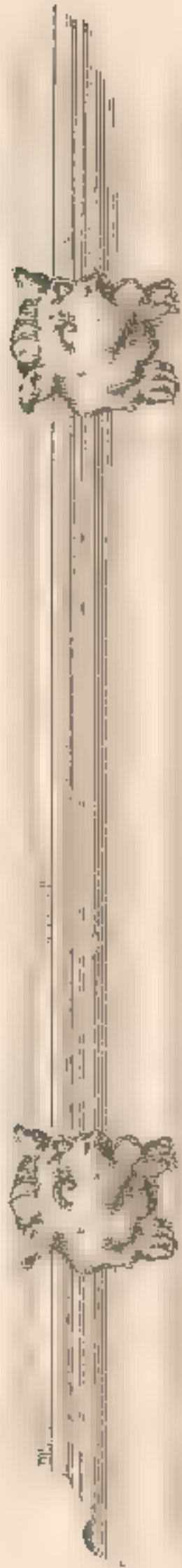
5 IN.



6 IN.

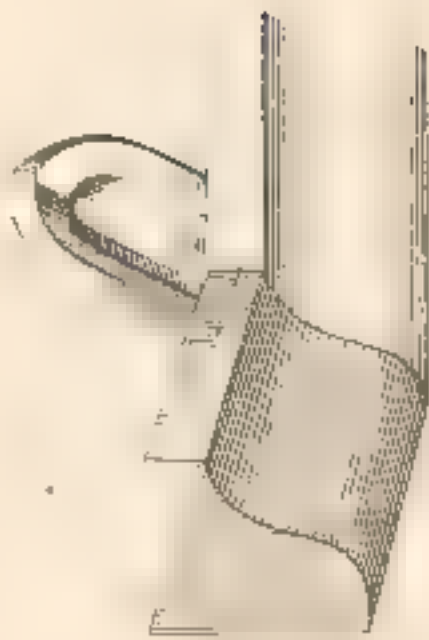
MA'FAR, ANE' 3 TIEP OF NAVEETS

3 FAR, 3

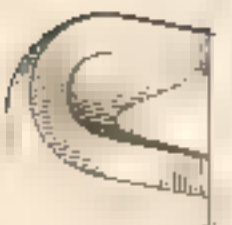


MACFARLANE'S GUTTER ORNAMENTS

Nº 5 ANTEFIXE FOR INTERNAL ANGLE



Nº 6 ANTEFIXE



3 1/2 5 AND 6 1/2 INS



Nº 5 ANTEFIXE FOR EXTERNAL ANGLE



Nº 6 ANTEFIXE FOR INTERNAL ANGLE



Nº 6 ANTEFIXE



5 1/2 7 1/2 AND 10 INS



Nº 6 ANTEFIXE FOR EXTERNAL ANGLE



Nº 7 ANTEFIXE FOR INTERNAL ANGLE



Nº 7 ANTEFIXE



7 INS



Nº 7 ANTEFIXE FOR EXTERNAL ANGLE



SCALE 1 INCH = 1 FOOT

MACFARLANE'S ORNAMENTAL GUTTER BRACKETS

No 3



We make the following sizes of No. 3, measuring between A and B:—
2 1/4, 2 1/2, 2 3/4, 3, 3 1/4, 3 1/2, 3 3/4, 4, 4 1/4, 4 1/2, 4 3/4, 5, 5 1/4, 5 1/2, 5 3/4, and 6 inches.

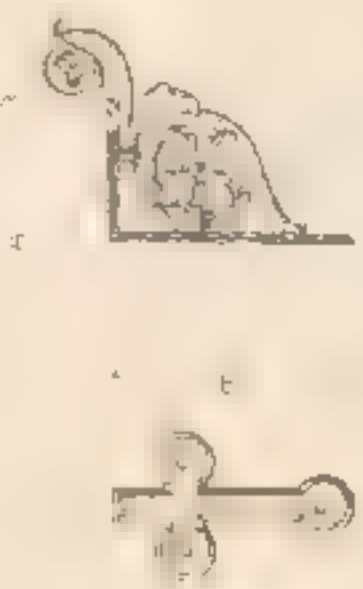
No 4



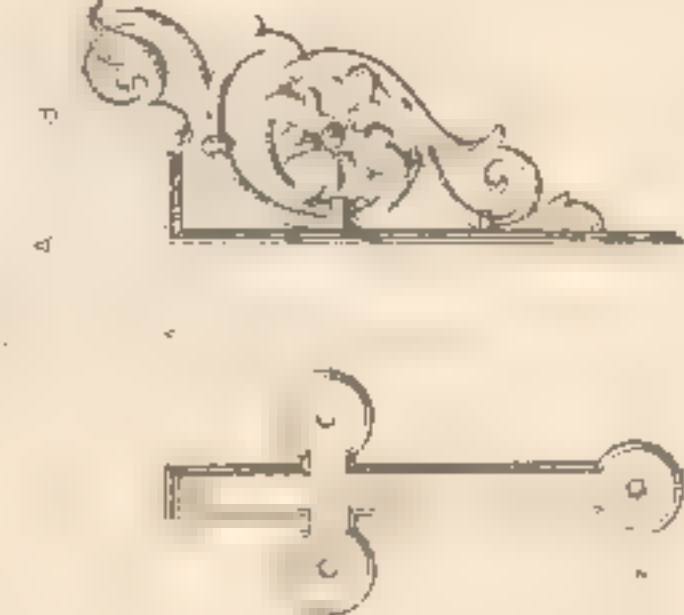
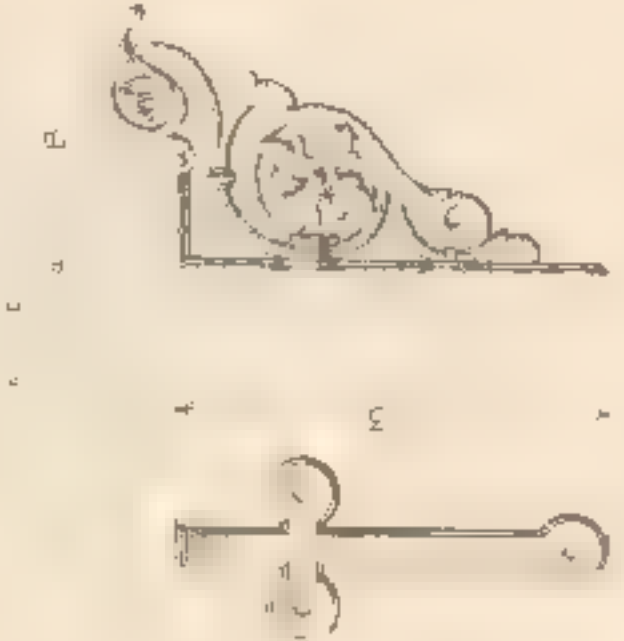
We make the following sizes of No. 4, measuring between A and B:—
2 1/4, 2 1/2, 2 3/4, 3, 3 1/4, 3 1/2, 3 3/4, 4, 4 1/4, 4 1/2, 4 3/4, 5, 5 1/4, 5 1/2, 5 3/4, 6, 6 1/4, 6 1/2, 6 3/4, 7, 7 1/4, 7 1/2, 7 3/4, and 8 inches.

Instructions for fitting up Nos. 3 and 4 Gutter Brackets:— The spike or holdfast portion being made of wrought iron, is first driven into the wall, which may be either stone, brick, or wood, and the cast-iron portion of the Bracket is then attached to it by the screw. The spike, or holdfast, can also be made for battens, or to suit any peculiar conformation of wall to order.

No 5



No 5



No 6



No 6



We make the following sizes of Nos. 5, 6, 10, 11, 12, and 13, measuring between A and B:—
2 1/4, 2 1/2, 2 3/4, 3, 3 1/4, 3 1/2, 3 3/4, 4, 4 1/4, 4 1/2, 4 3/4, 5, 5 1/4, 5 1/2, 5 3/4, 6, 6 1/4, 6 1/2, 6 3/4, 7, 7 1/4, 7 1/2, 7 3/4, and 8 inches, thus suiting every pattern and size of Gutter in our Catalogue.

In ordering, be particular to state the No. and size of Gutter to which the Bracket is to be attached.

INCH - - - FOOT

Nº 64



SCALE IN FEET

SECTION OF GUTTER CORNICE
SHOWING METHOD OF CONSTRUCTION

- A Nº 64. ORNAMENTAL FIGURED GUTTER 2 $\frac{1}{2}$ ' x 8
- B Nº 6 B' GUTTER BRACKETS
- C Nº 232 CRESTING 1" II'
- D Nº 94. TERMINAL 3' I
- E Nº 16 P PE 5' x 3 $\frac{1}{2}$
- F Nº 70 HEAD
- G Nº 25 EARS
- H EAVE CREST SOCKET



SCALE 1/2 INCH = 1 FOOT

MACFARLANE'S EXAMPLES.—Application of Gutter, Cresting, &c., to building. (See Frontispiece Elevation of New Works at Possilpark.)

MACFARLANE'S PATENT GUTTERS AND ROOF PLATES

No 76

A No 58 ORNAMENTAL FIGURED GUTTER 2' x 7'

B No 5' 5" R DGE PLATE

C No 20 PIPE HEAD

D DROP GRATE

E PLAT CREST SOCKET

F R DGE PLATE WITH SOCKET

G R DGE PLATE WITH DOVETAIL SOCKET

H No 39 CENTRE GUTTER 18' x 6'

I SNOW GRATE

J No 33 CLRB PLATE

K No 39 CREST NG 4

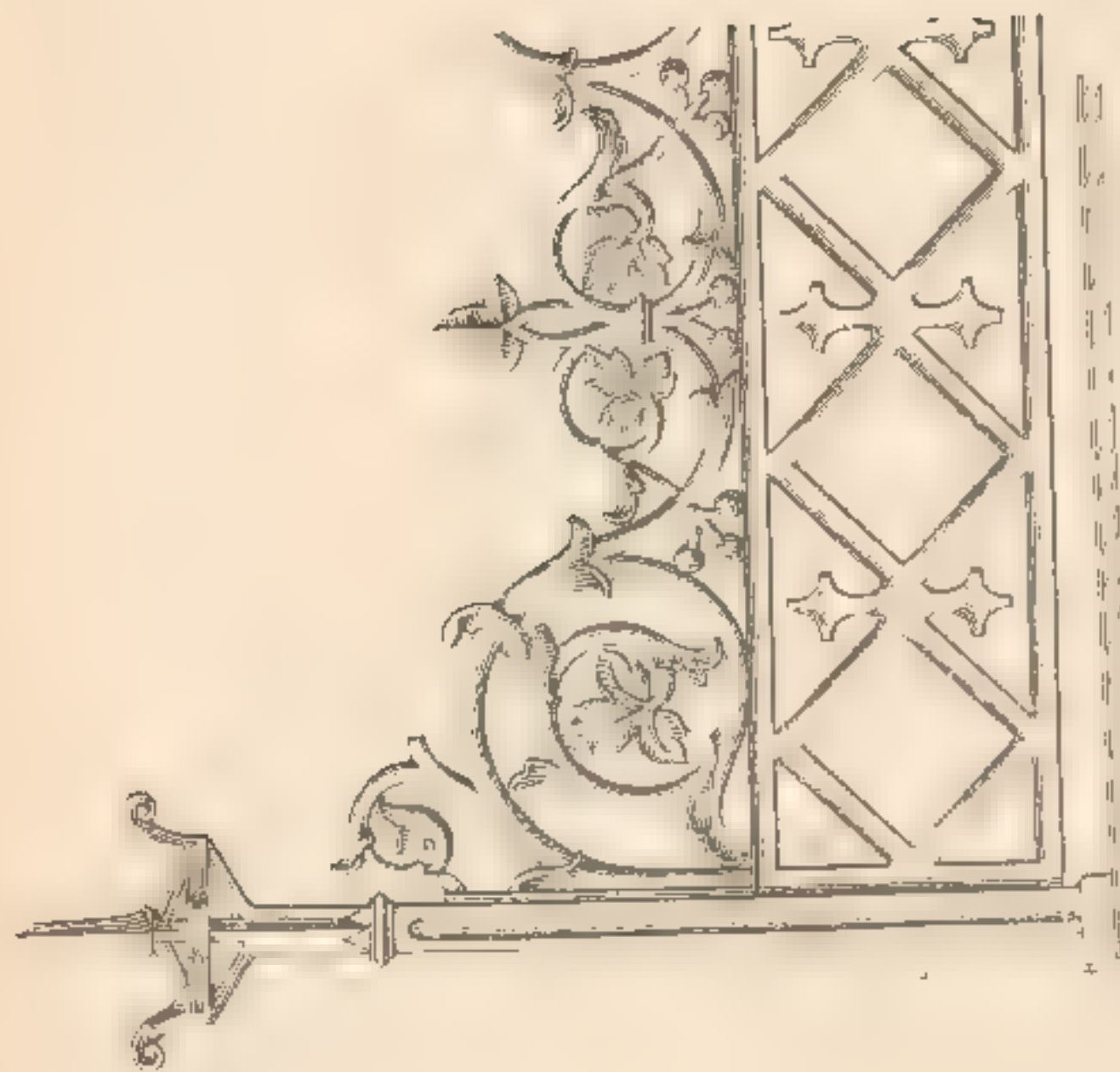
L No 28 BOUNDARY WALL GUTTER 14' x 5'

M FLASHING PLATE

N PLATE

O PLATE

P No COLUMN 4'



SECTION III.—ROOF PLATES.

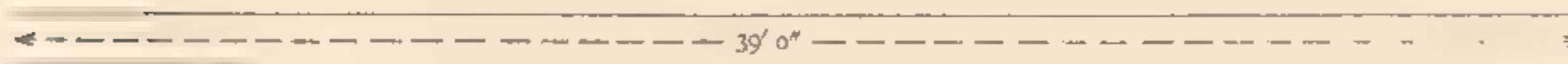
EMBRACING RIDGE, VALLEY, AND SKEW PLATES, CURB AND HIP PLATES FOR PAVILION, DORMER, TOWER, AND MANSARD ROOFS

DIRECTIONS FOR ORDERING.

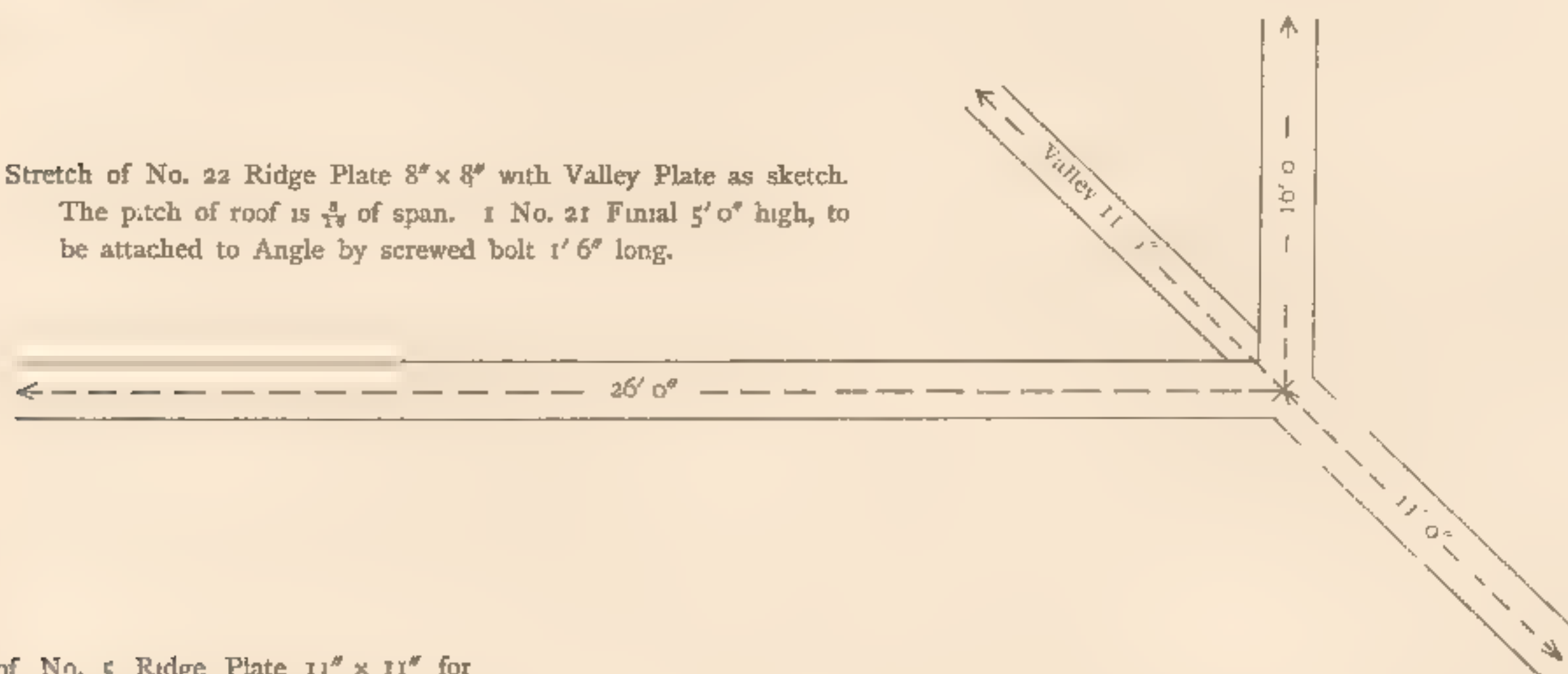
In ordering Roof Plates our customers will please state the No. and size, also the pitch of roof they are to fit, and they may either order the required number of 6 feet lengths, along with the necessary quantity and description of connections, and cut them to suit the buildings themselves, or by giving us a plan of the building with the exact measurements, we will supply them all properly marked and ready for fitting up. In ordering Curb and Hip Plates for Mansard Roofs, it is desirable to send a drawing showing section of Roof at curb, in order that the Plates may be made of suitable bevels. The diagrams on page 124 show the eight pitches of roof which our Ridge and Valley Plates are made to fit. *Intermediate or other pitches to order.*

The following examples show the simplest method of ordering Roof Plates, &c., when they are wanted cut to particular measurements:—

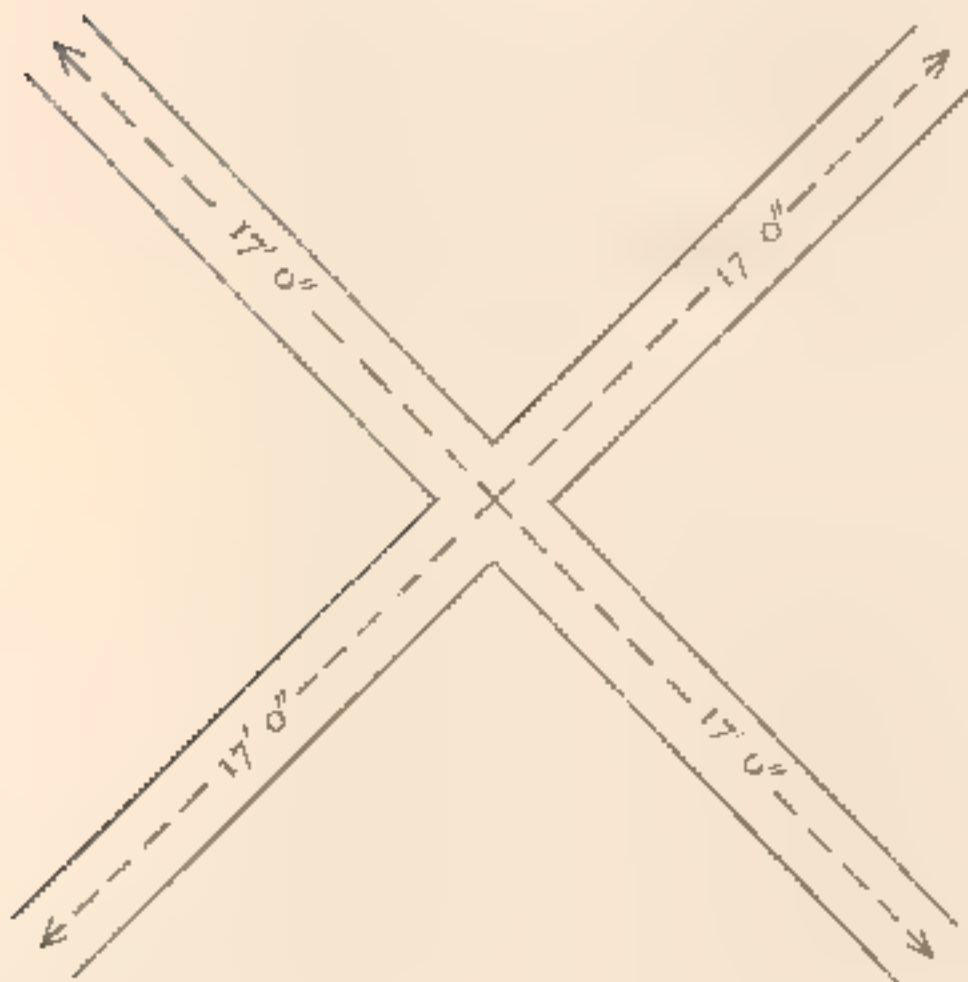
1 Stretch of No. 20 Ridge Plate 6" x 6" as sketch. The pitch of roof is $\frac{1}{4}$ of span.



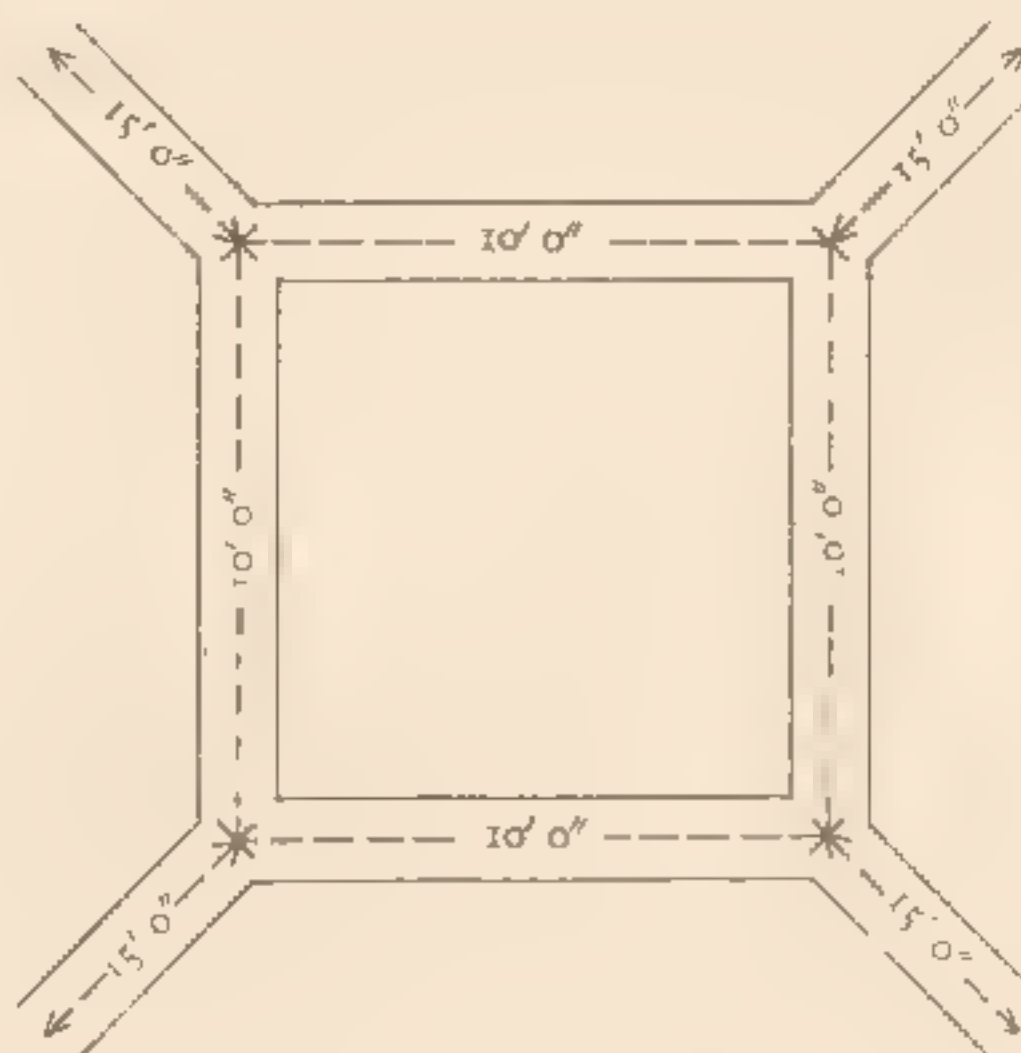
1 Stretch of No. 22 Ridge Plate 8" x 8" with Valley Plate as sketch. The pitch of roof is $\frac{3}{4}$ of span. 1 No. 21 Finial 5' 0" high, to be attached to Angle by screwed bolt 1' 6" long.



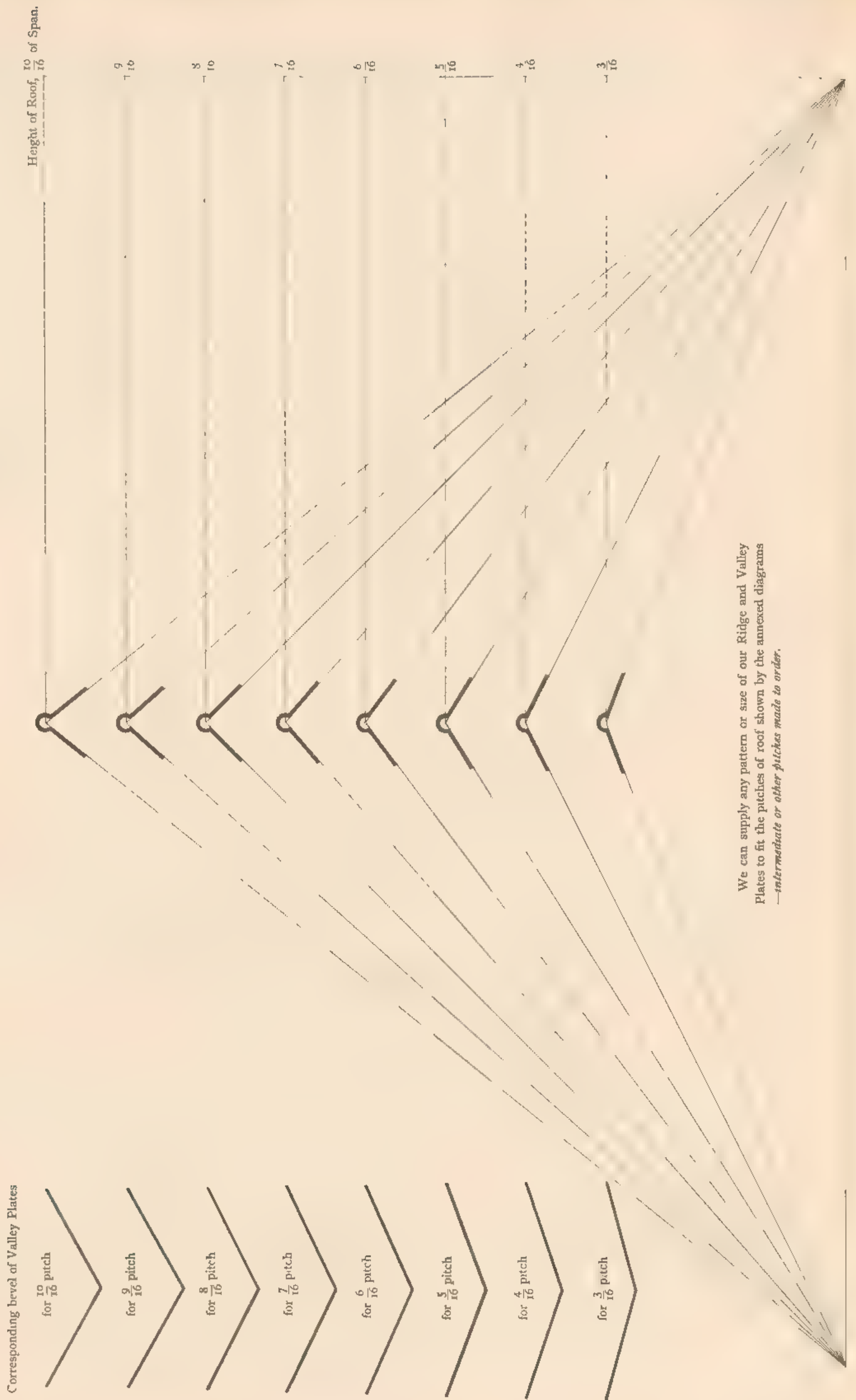
1 Stretch of No. 5 Ridge Plate 11" x 11" for pavilion roof as sketch. The pitch of roof is $\frac{1}{8}$ of span. 1 No. 28 Finial 7' 0" high, to be attached to Apex by screwed bolt 1' 6" long.



1 Set of Curb and Hip Plates, Cresting, &c., for Mansard roof as sketch, consisting of No. 33 Curb Plate 20 1/2", and No. 31 Hip Plate 12 1/2" x 12 1/2", with Corner Shields as per drawings. No. 162 Cresting 4' 0" high, having No. 158 Bannerets 8' 3" high at corners, fitted with wrought-iron screwed bolts 1' 6" long. Bevel of roof as per drawings.

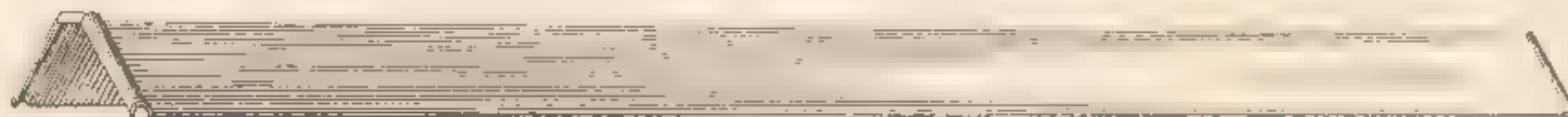


MACFARLANE'S RIDGE AND VALLEY PLATE DIAGRAMS

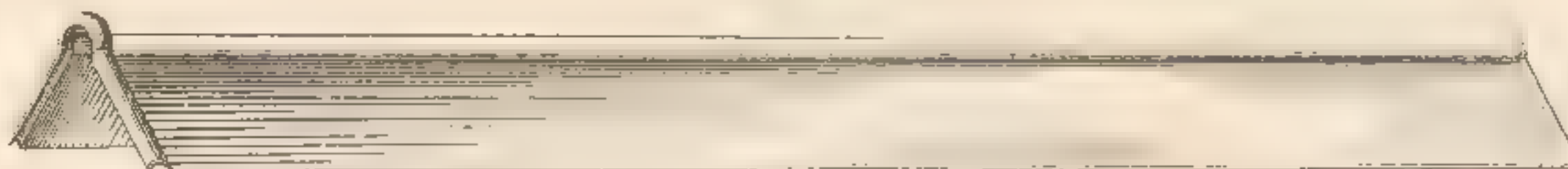


MACFARLANE'S PATENT RIDGE PLATES

These are made in 6 feet lengths, and to fit the following pitches of roofs: $\frac{1}{16}$, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, $1\frac{1}{4}$, $1\frac{1}{2}$, and $1\frac{3}{4}$ of span. See diagram, page 124.
Odd pitches *to order*.

N^o 1

5 x 5 IN.

N^o 20

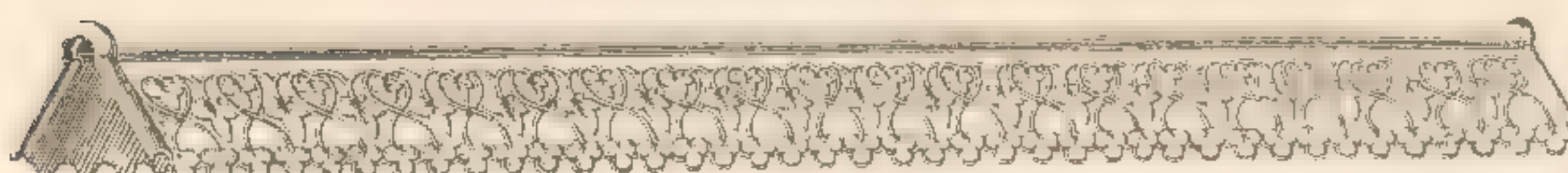
6 x 8 AND 8 x 8 IN.

N^o 1

8 x 8 IN.

N^o 2

8 x 8 IN.

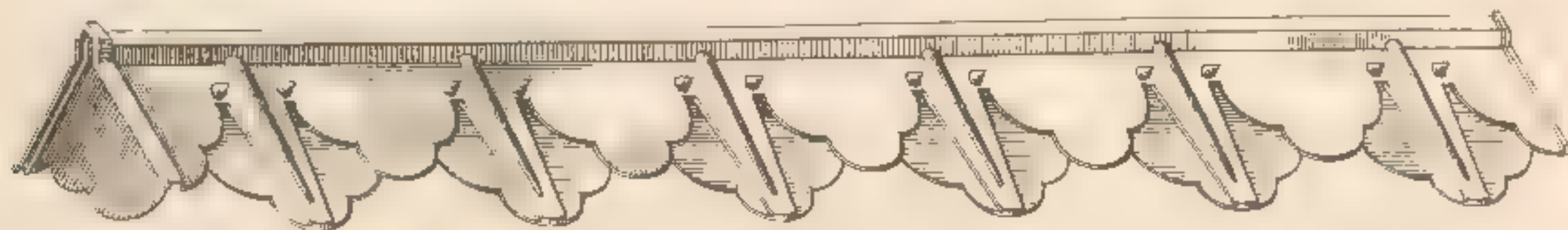
N^o 2

8 x 8 IN.

SCALE 1 INCH = 1 FOOT

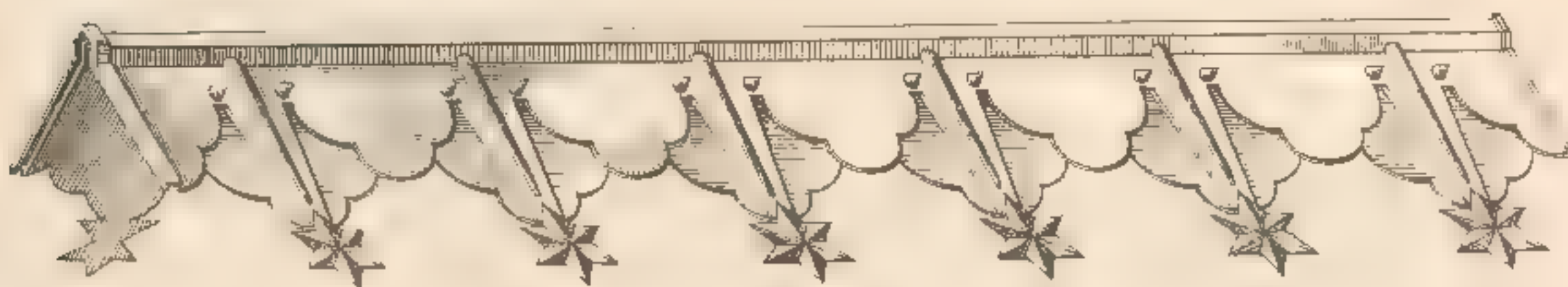
MACFARLANE'S PATENT RIDGE PLATES AND CONNECTIONS.

No 3



1 x 11 INS

No 26



16 x 16 INS

No 26 TURRET CAP



LEFT HAND ANGLE



RIGHT HAND ANGLE



PAV. ON APEY



LEFT HAND PAVIL ON ANGLE



RIGHT HAND PAVILION ANGLE



CROSS



LEFT HAND T



RIGHT HAND T



We can supply the above Connections for any pattern, size, or pitch of Ridge Plate in our Catalogue.

SCALE 1 INCH = 1 FOOT

MACFARLANE'S VALLEY PLATES &C

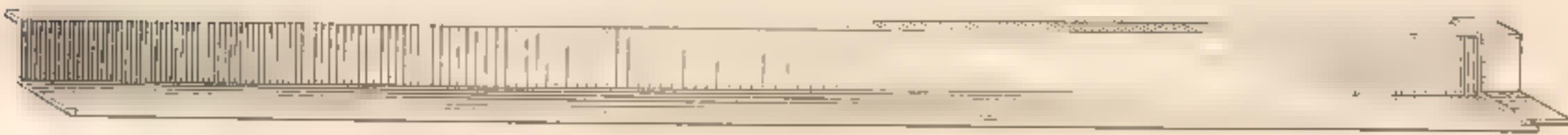
N 6 FEET LENGTHS

VALLEY PLATE

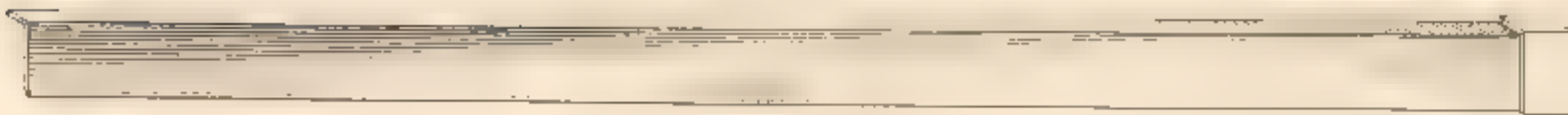
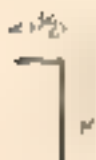
These are made of bevels to suit the same roofs as our Ridge Plates. See diagrams, page 124.



SKEW PLATE

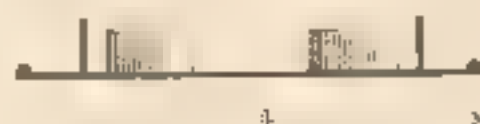


FLASHING PLATE



STEP PLATE

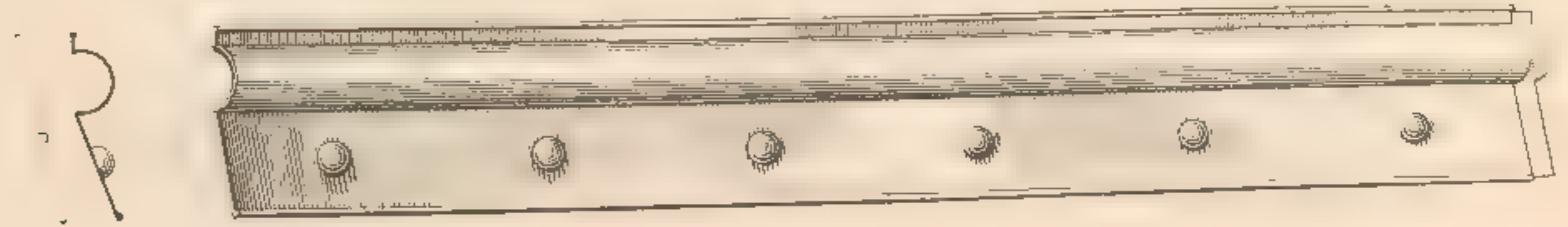
FOR PASSAGE OVER ROOFS



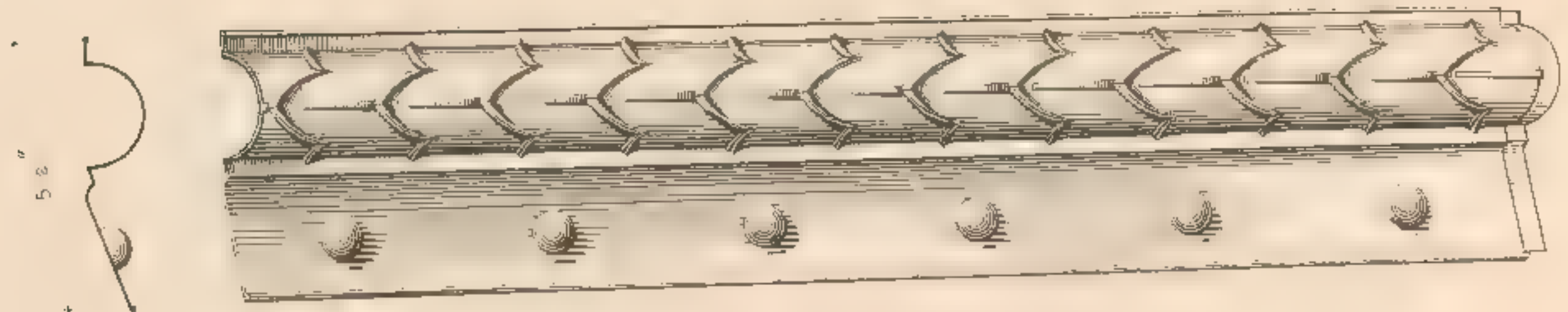
SCALE INCH = 1 FOOT

MACFARLANE'S CURB PLATES FOR MANSARD ROOFS
IN 6 FEET LENGTHS.

Nº 30.



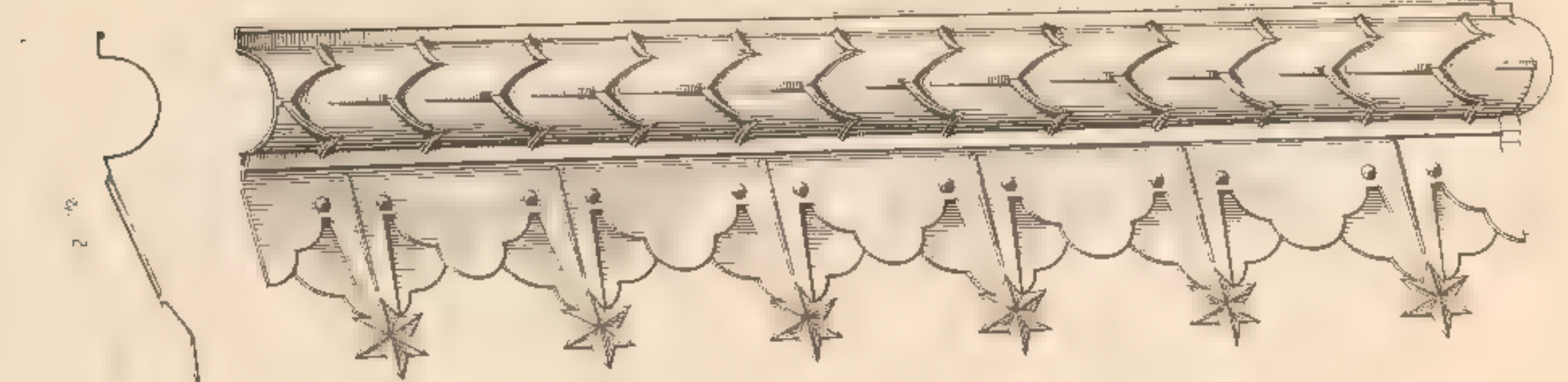
Nº 31.



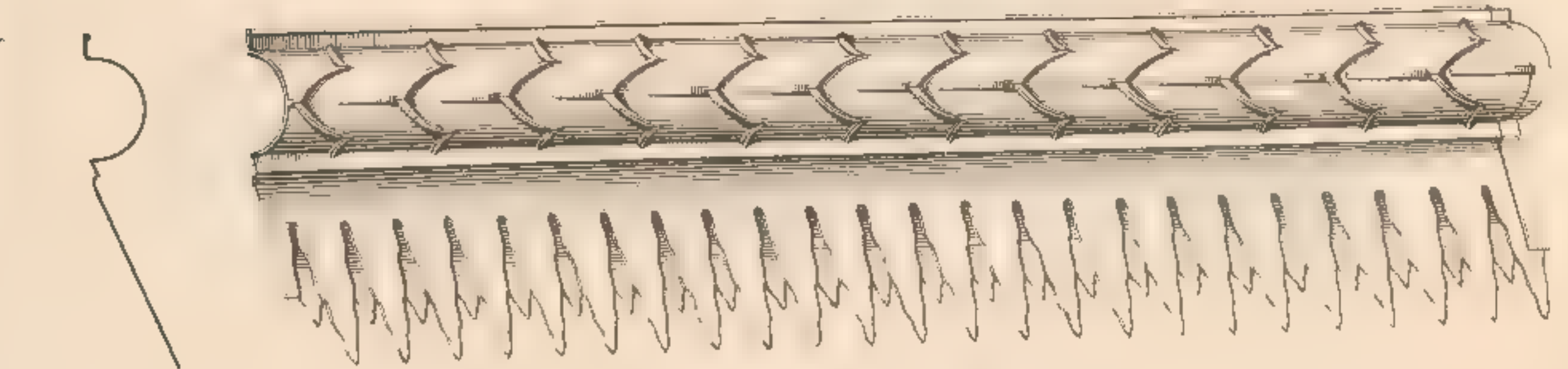
Nº 32.



Nº 33.



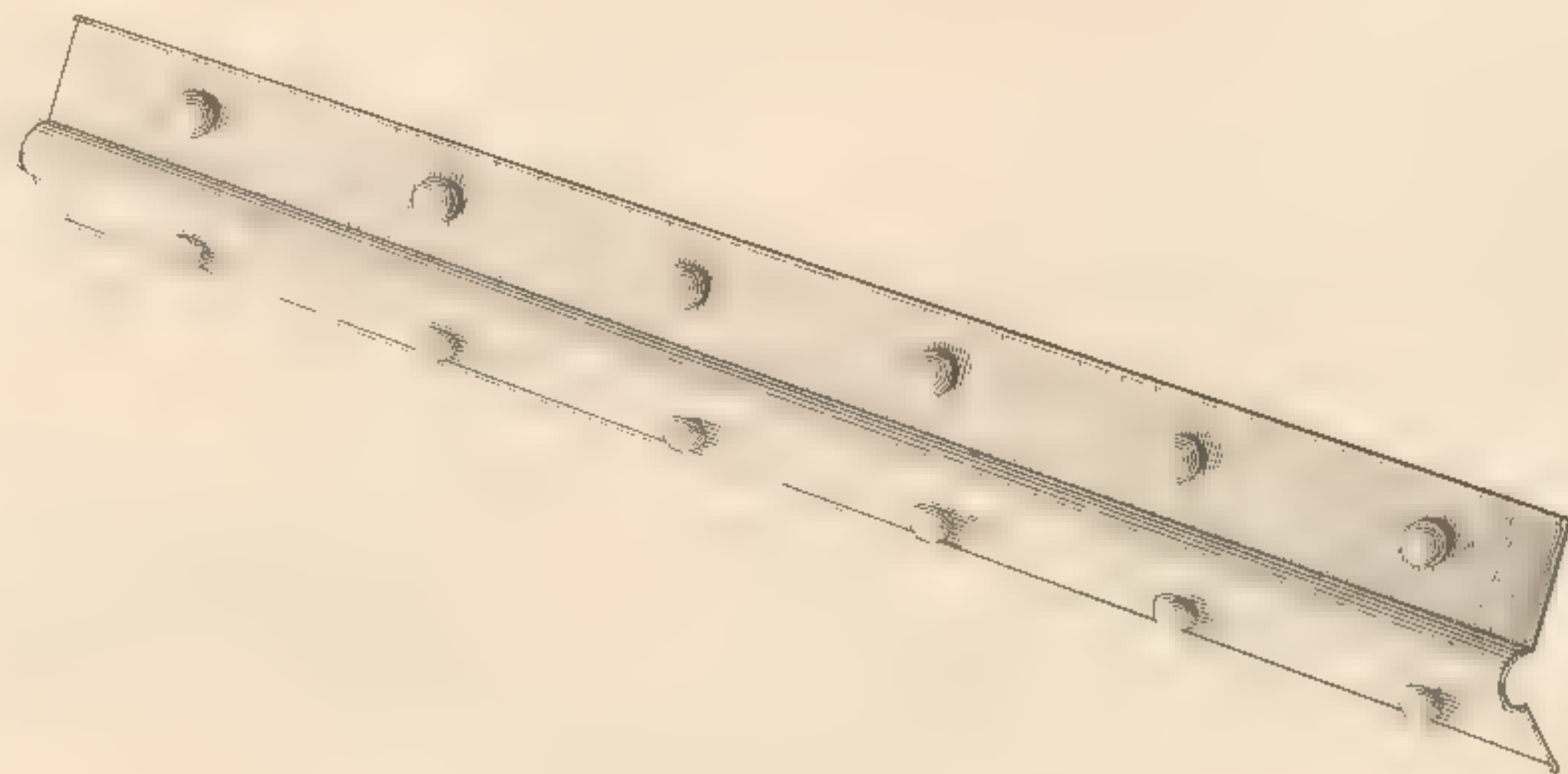
Nº 34.



SCALE 1/4" = 1' 0"

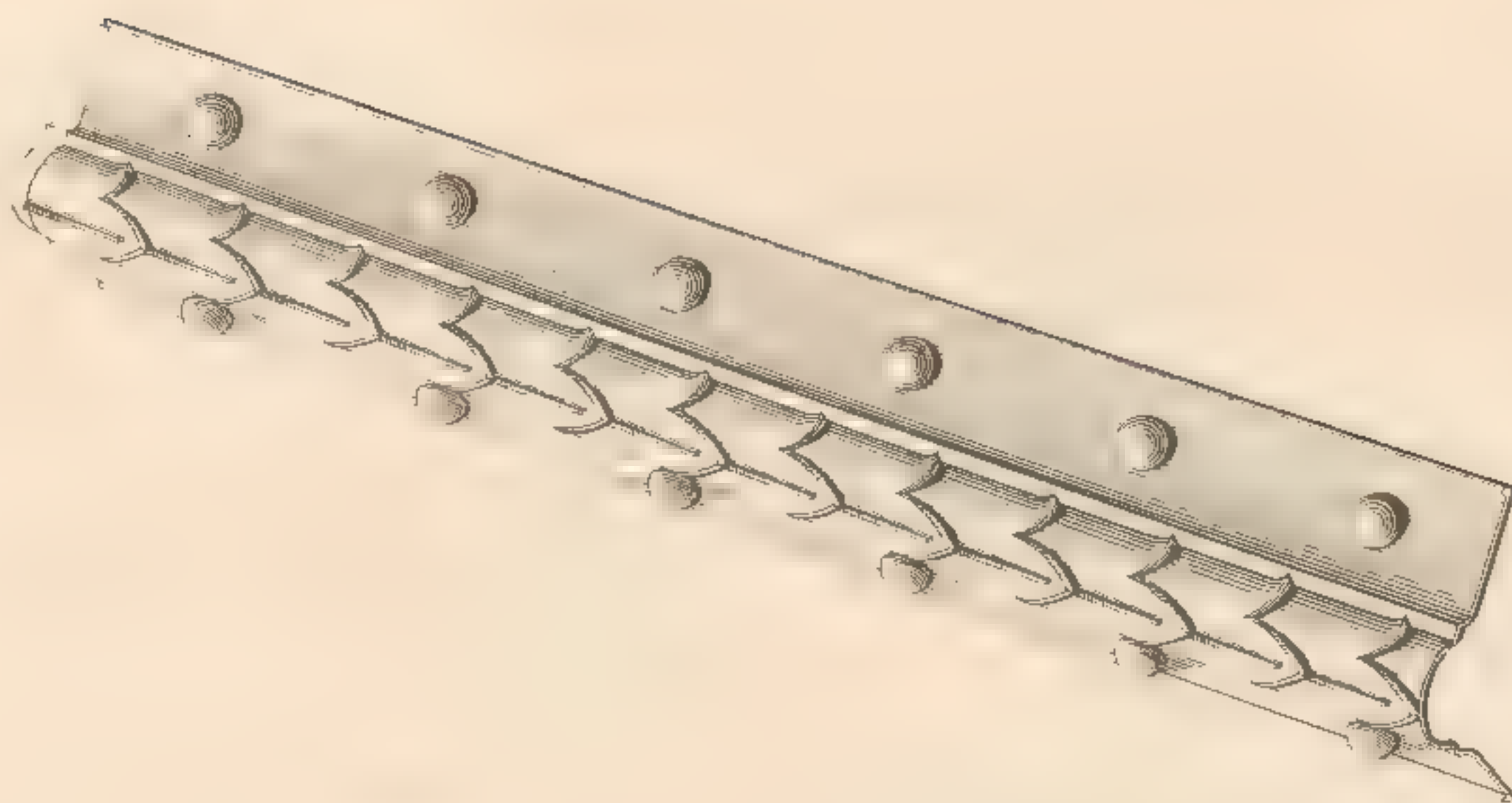
MACFARLANE'S HIP PLATES FOR MANSARD ROOFS
IN 6 FEET LENGTHS.

Nº 30



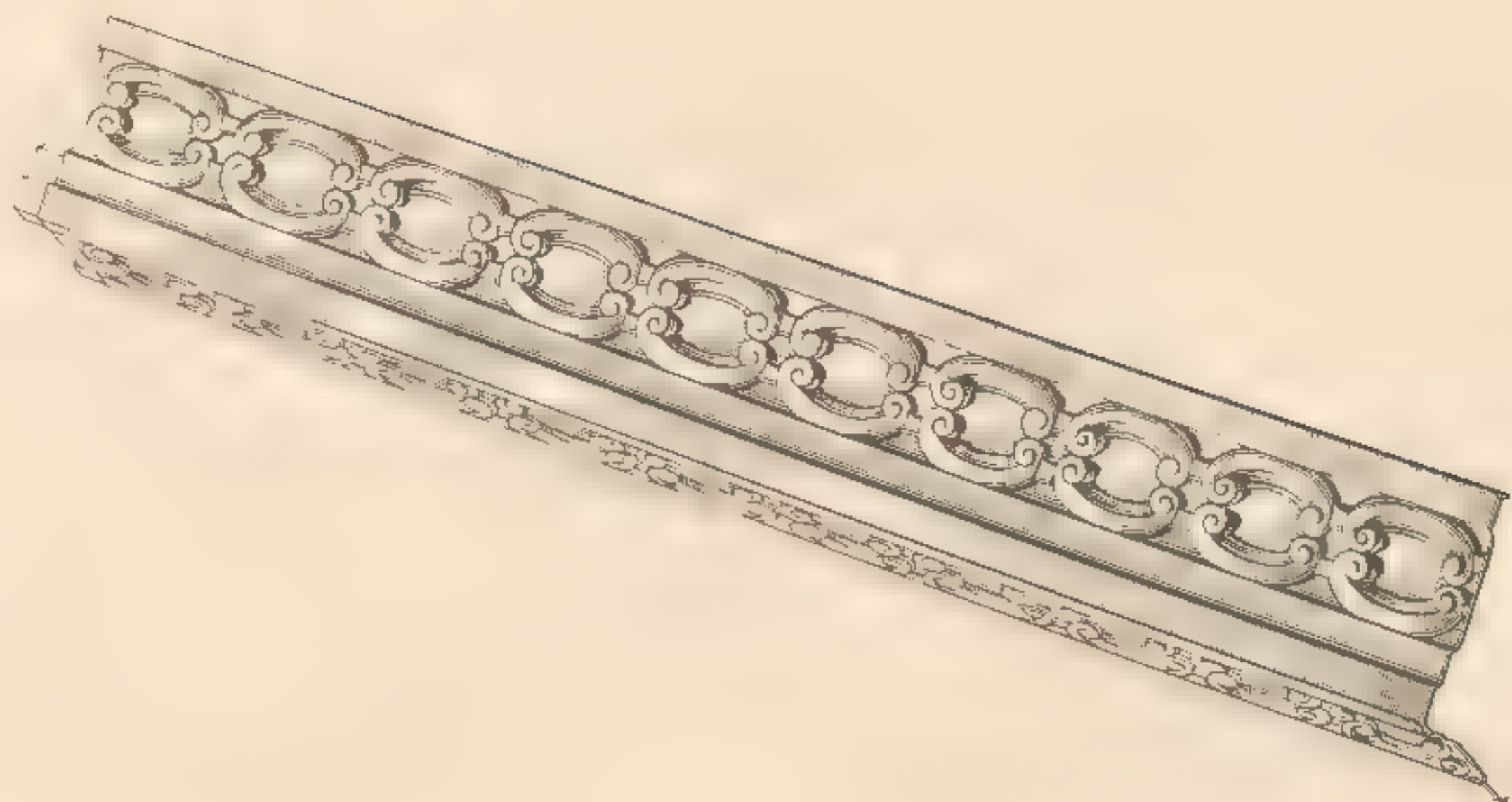
8 1/2 x 8 1/2 INS

Nº 31



22 x 4 1/2 INS

Nº 32



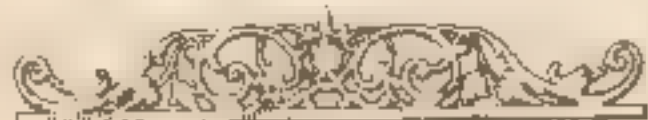
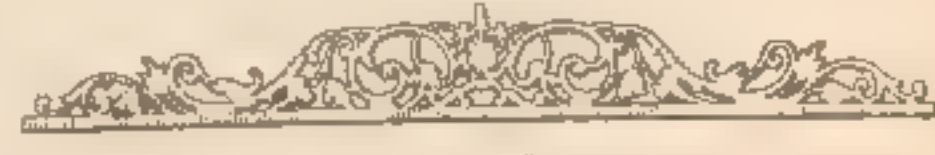
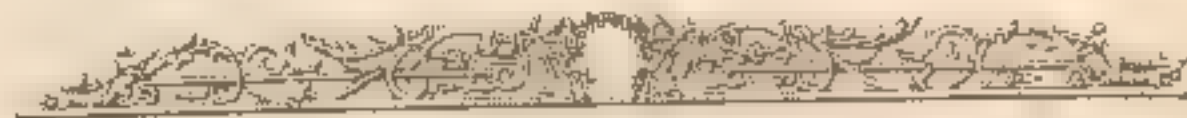
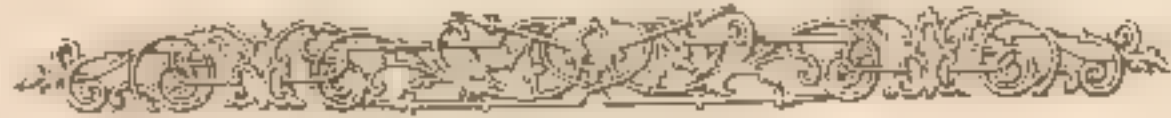
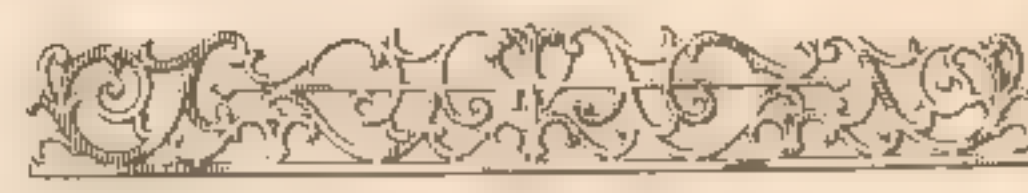
2 x 2 INS

1/2 ALF 1/2 H = FOOT

SECTION IV. TERMINALS.

MACFARLANE'S

TERMINALS, FINIALS, CROSSES, BANNERETS, WEATHERVANES, FLAGSTAFFS, &c

N^o 2641' 9 1/2"
One face.N^o 2652' 1"
One face.N^o 2647 3/4"
One face.N^o 2702' 8 1/2"
One face.N^o 2653' 3 1/4"
One face.N^o 2683' 4"
One face.N^o 2743' 3"
One face.N^o 2673' 8 1/4"
One face.
Any device can be added to order.N^o 2743' 3"
One face.N^o 2663' 2 1/2"
One face.N^o 2693' 3 1/2"
One face.N^o 2674'
One face.
Any device can be added to order.N^o 2722' 8"
One face.N^o 2663' 10 1/4"
One face.
Any device can be added to order.N^o 2732' 10 1/4"
One face.N^o 2622' 4"
One face.
Any device can be added to order.N^o 2783' 2 1/4"
One face.

SCALE 1 INCH = 1 FOOT

MACFARLANE'S TERMINALS &c

No 84 5 1/2 INS. HIGH

F. A. T.



APEX.



INTERNAL ANGLE



EXTERNAL ANGLE



LEFT HAND GABLE CORNER



RIGHT HAND GABLE CORNER



LEFT HAND END



RIGHT HAND END



No 84 7 1/2 INS. HIGH

F. A. T.



APEX.



INTERNAL ANGLE



EXTERNAL ANGLE



LEFT HAND GABLE CORNER



RIGHT HAND GABLE CORNER



LEFT HAND END



RIGHT HAND END



No 84 Apex and Gable Corners can be made to any required bevel

No 85



No 86



No 87



No 88



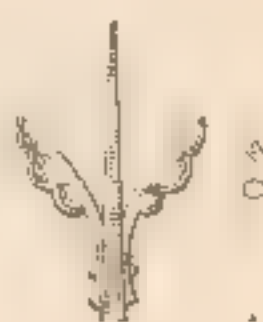
No 89



No 90



No 91



No 92



No 93



SCALE 1 INCH = FOOT

MACFARLANE'S TERMINALS &C.

NO 84. 0 NS. H GH

INTERNAL ANGLE

EXTERNAL ANGLE



APEX

LEFT HAND GABLE CORNER

RIGHT HAND GABLE CORNER



LEFT HAND END

RIGHT HAND END



No. 84 Apex and Gable Corners can be made to any required bevel.

NO 31

NO 45

NO 8

NO 99

NO 188



ARMS 2 AND 4 WAYS

NO 239

NO 239

NO 222



SCALE 1 INCH = 1 FOOT

MACFARLANE'S TERMINALS &c

No 84. 1 FT. 1 IN HIGH

FLAT



INTERNAL ANGLE



EXTERNAL ANGLE



APL



LEFT HAND GABLE CORNER



RIGHT HAND GABLE CORNER



LEFT HAND END



RIGHT HAND END



No. 84 Apex and Gable Corners can be made to any required bevel

No 74.



No 182



ARMS 2 AND 4 WAYS

No 213



1 4

No 83



ARMS 2 AND 4 WAYS

No 104



No 228



1 2

No 21



2

No 90.



2 2

No 21



3 3

No 78



1 3

SCALE 1 INCH = FOOT

MACFARLANE'S TERMINALS &C

No 63



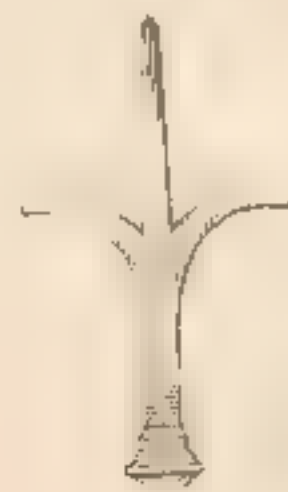
No 44



No 2



No 54



No 44



No 2



ARM 2 AND 4 WAYS

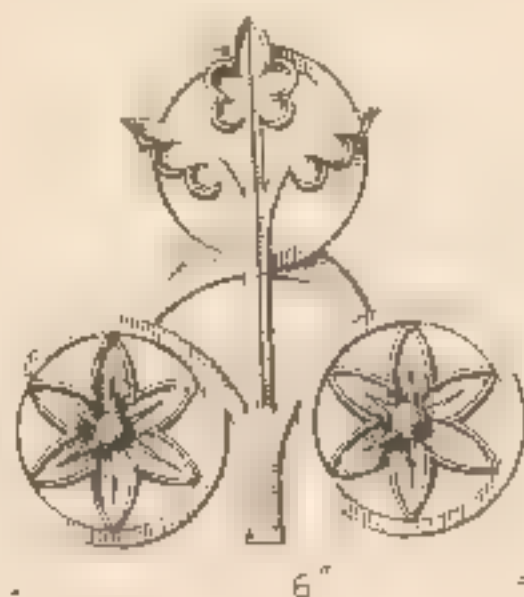
No 76



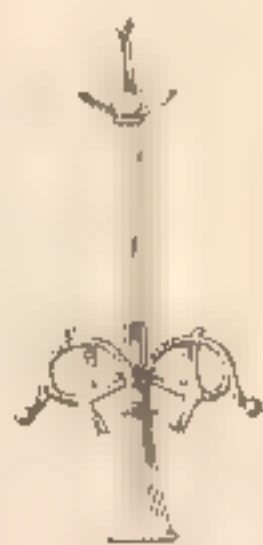
2' 8 1/2"

No. 176 can be made flat, or to any required bevel.

No 130



No 2



No 7



ARMS 2 AND 4 WAYS

No 100



No 20



No 142



No 52



No 6



No 23



No 28



No 21



ARMS 2 AND 4 WAYS

SCALE 1 INCH = 1 FOOT

MACFARLANE'S TERMINALS &c

No 84. 1 FT. 6 INS. HIGH



INTERNAL ANGLE



INTERNAL ANGLE



LEFT HAND GABLE CORNER



RIGHT HAND GABLE CORNER



LEFT HAND END



RIGHT HAND END



No. 84. Apex and Gable Corners can be made to any required bevel.

SCALE 1 INCH = 1 FOOT

MACFARLANE'S TERMINALS &c

No 6



No 3



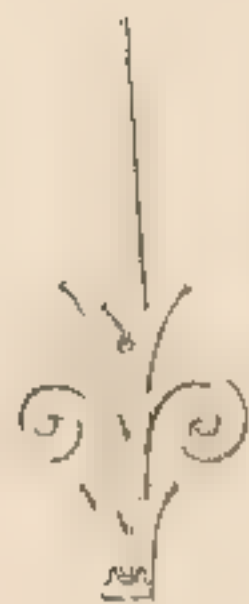
No 4



No 26



No 7



No 14



No 15



No 23



3 + MS 2 AND 4 WAYS

No 82



No 13



ARM AND 4 WAYS

No 88



No 25



No 47



No 32



No 86



No 203



22

SCALE 1 INCH = 1 FOOT

MACFARLANE'S TERMINALS &c

No 106 FT 8 1/2 NS. HIGH.

FLAT

1
5
Rd
A

LEFT HAND END



RIGHT HAND END



APEX



LEFT HAND GABLE END



RIGHT HAND GABLE END

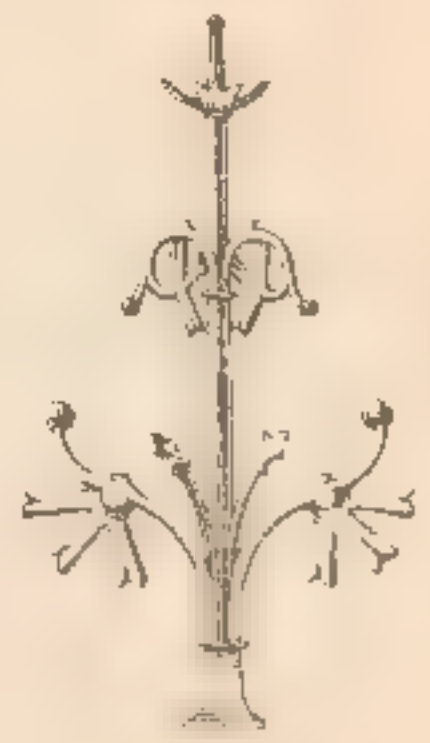
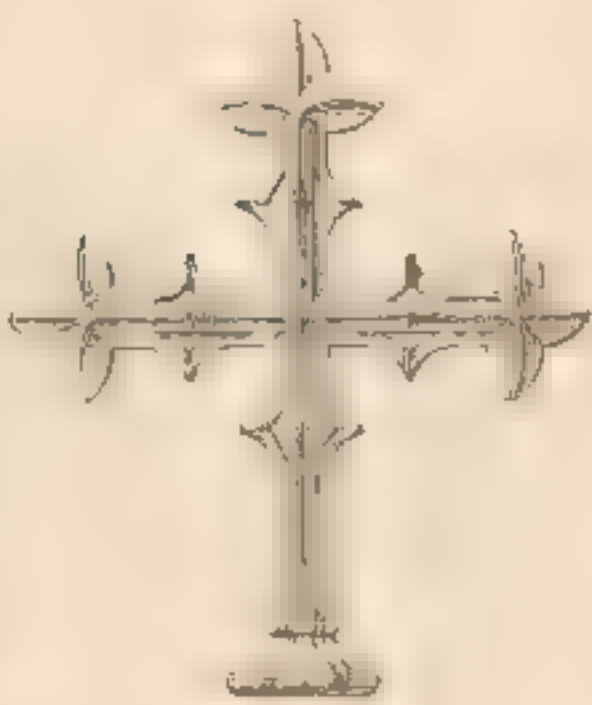
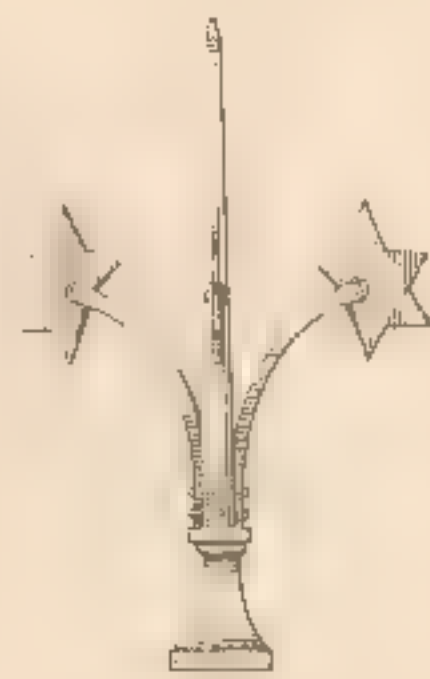


No. 106, Apex and Gable Ends can be made to any required bevel

See also No. 106, 3' 3" page 153

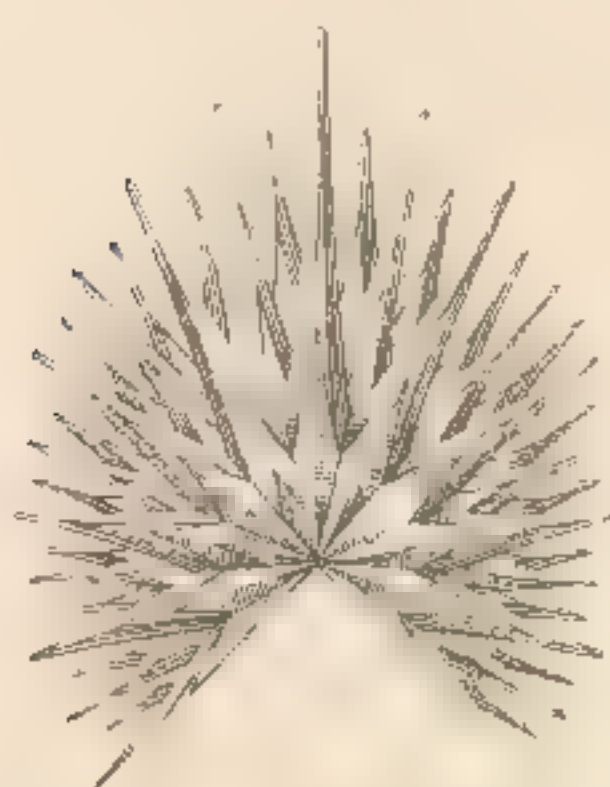
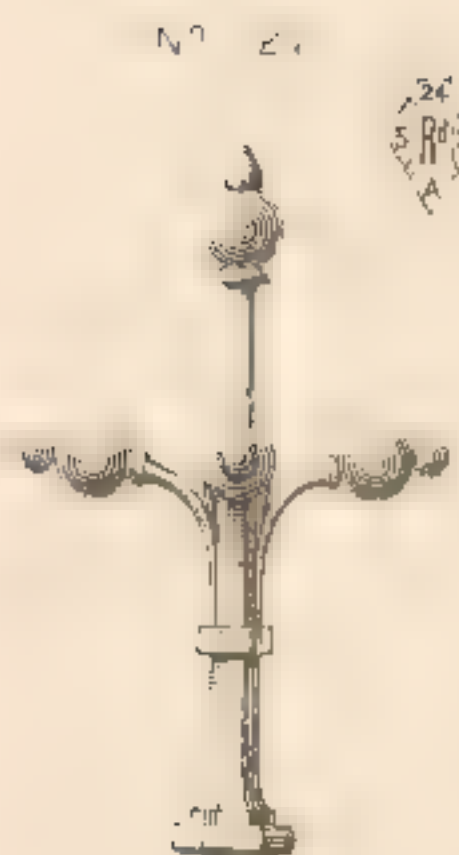
SCALE 1 INCH = 1 FOOT

MACFARLANE'S TERMINALS &c



MACFARLANE'S TERMINALS &c

Nº 102



Nº 102 in bevel and in square bevel

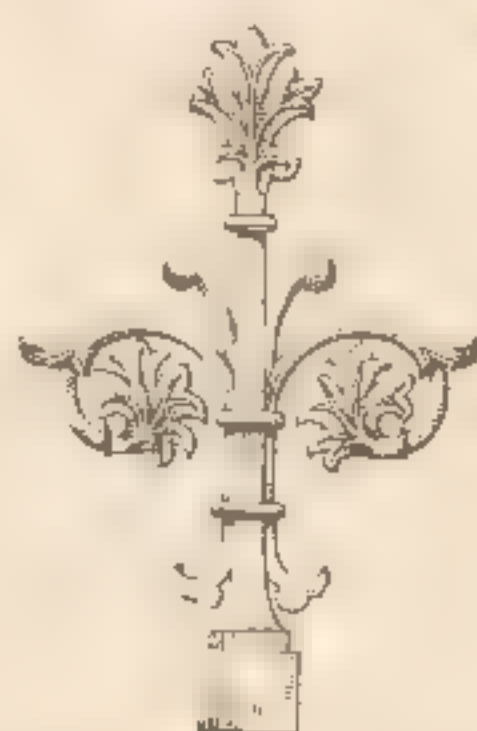
Nº 69



Nº 77



Nº 103



Nº 104



ARMS 2 AND 4 WAYS

ARMS 2 AND 4 WAYS

ARMS 2 AND 4 WAYS

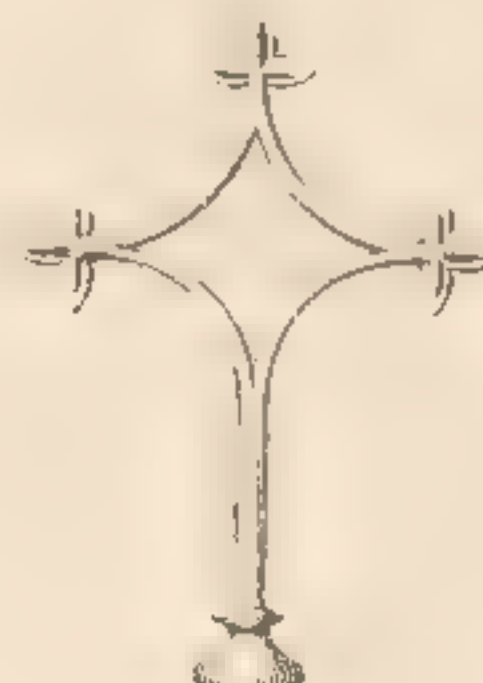
Nº 156



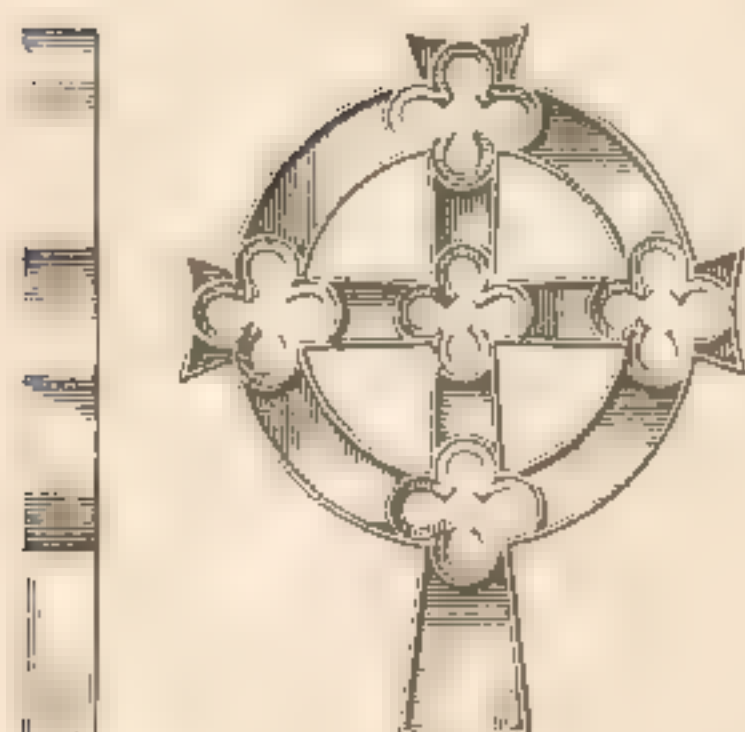
Nº 105



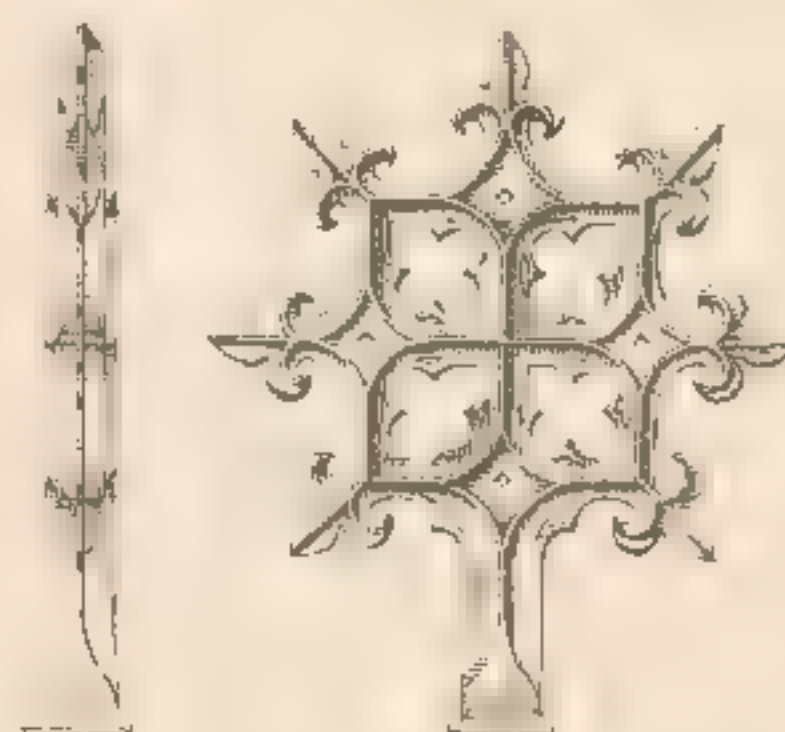
Nº 204



Nº 37

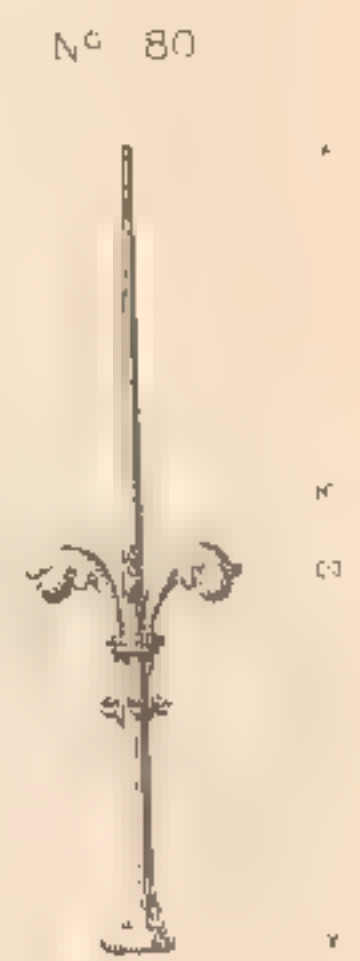
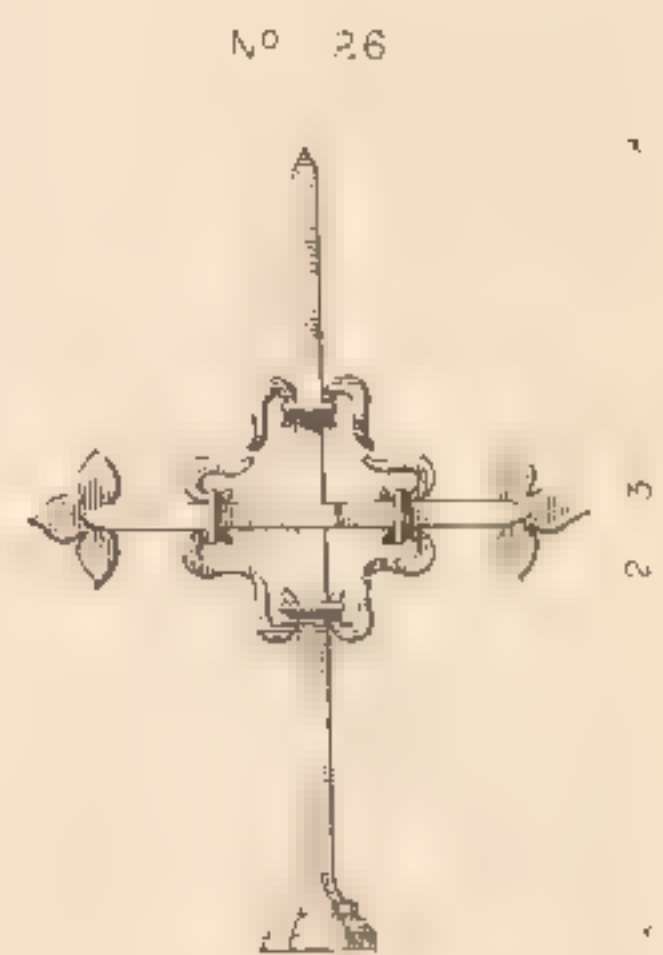


Nº 38



SCALE INCH - 1 FOOT

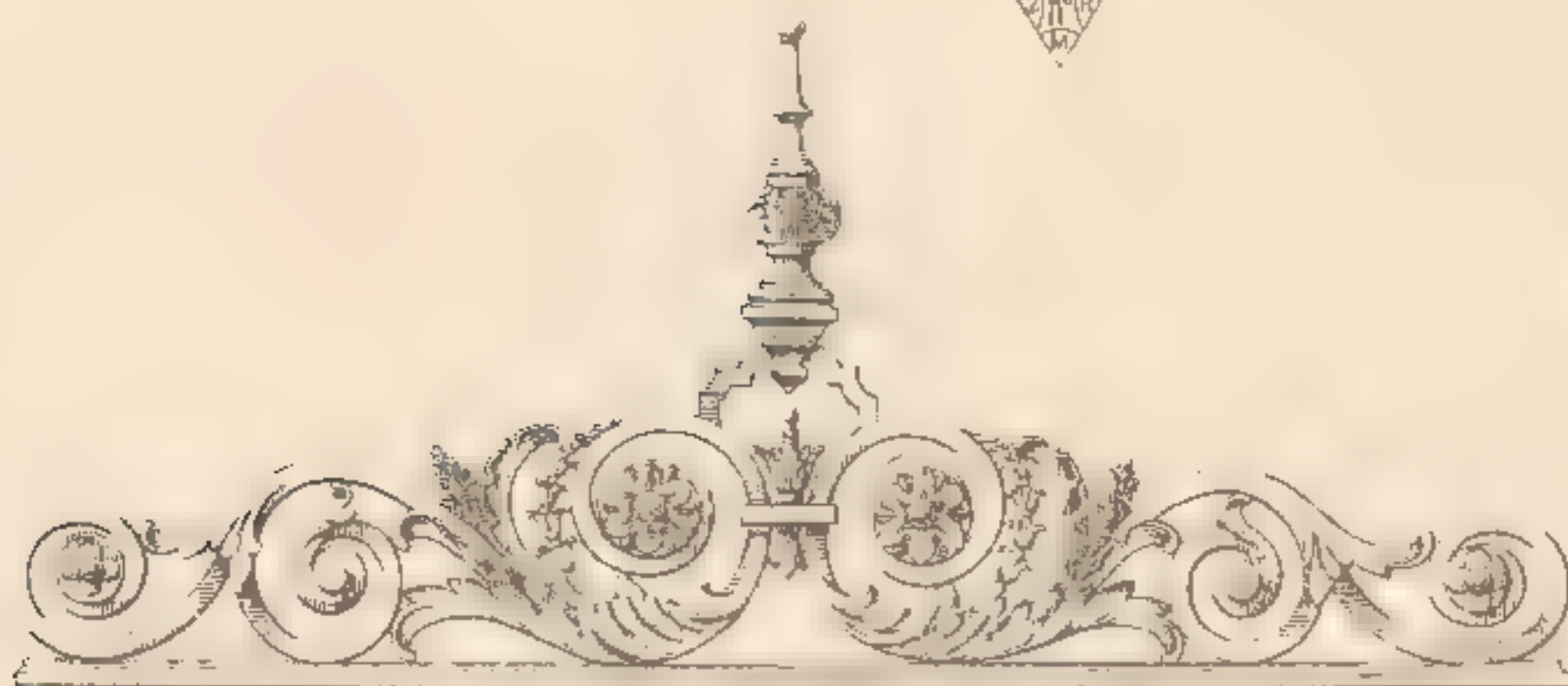
MACFARLANE'S TERMINALS & C



SCALE 1 INCH = 1 FOOT

MACFARLANE'S TERMINALS &c

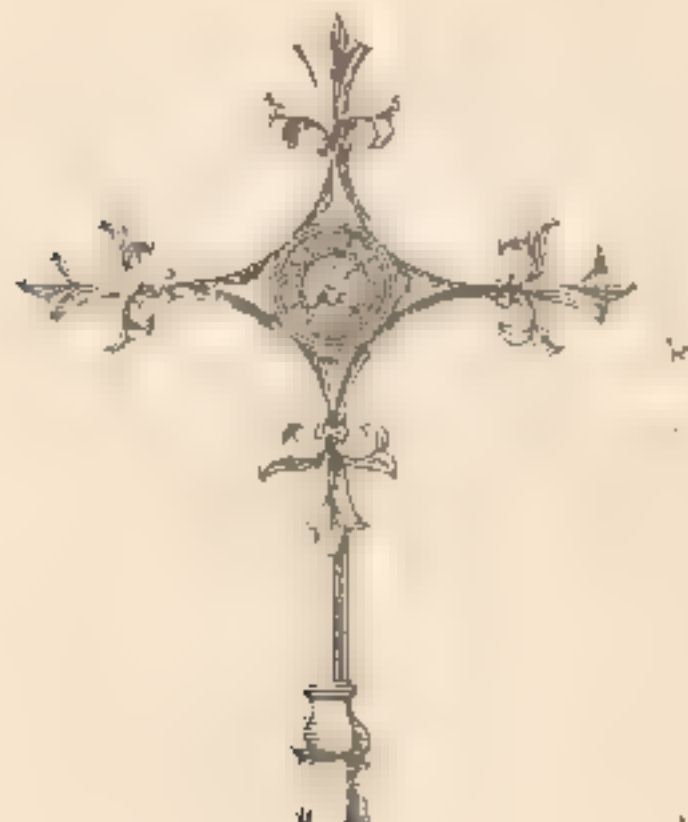
Nº 238



Nº 36



Nº 37

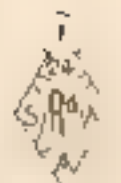


Nº 38

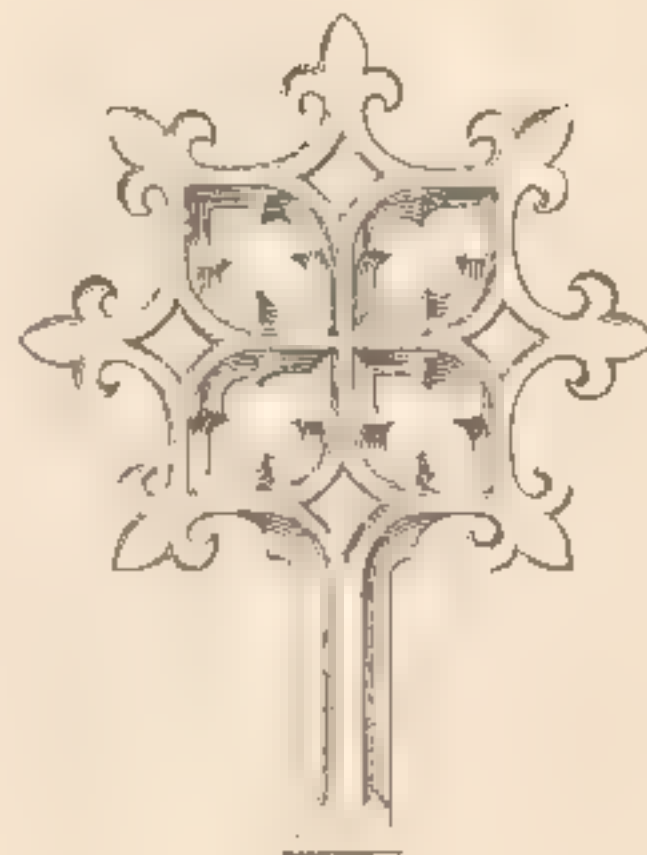
T
A
R
3



Nº 39



Nº 40



Nº 41



1 1/2 M 2 A 1 1/2 W A 1

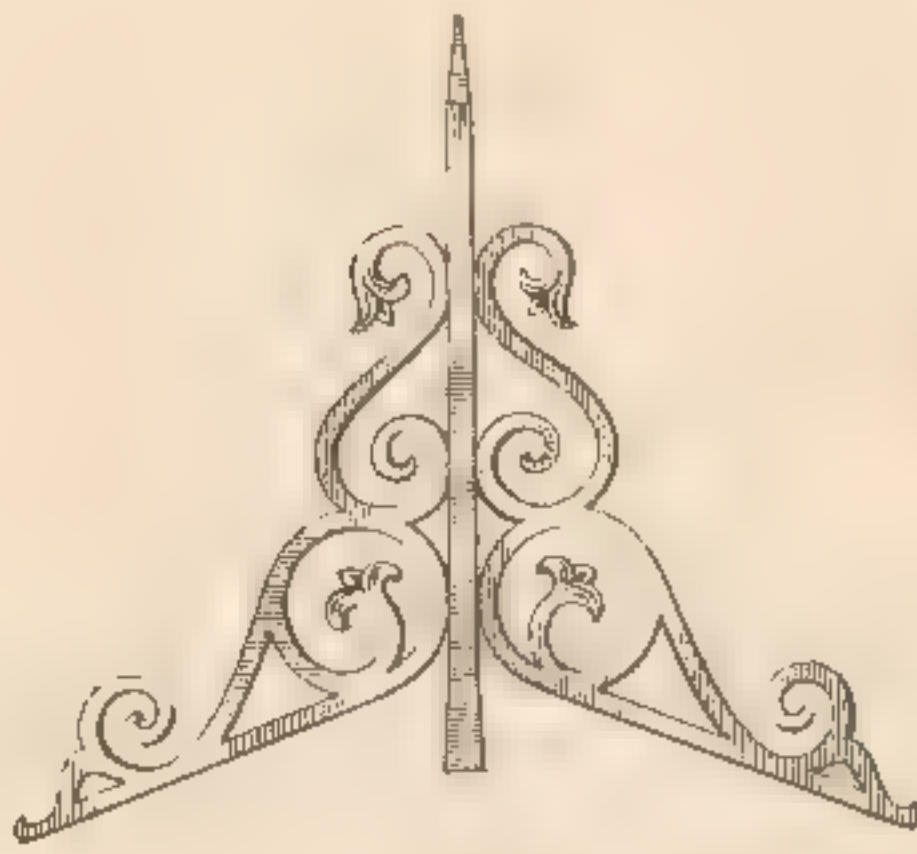
SCALE 1 INCH = FOOT

MACFARLANE'S TERMINALS &c

No. 0.

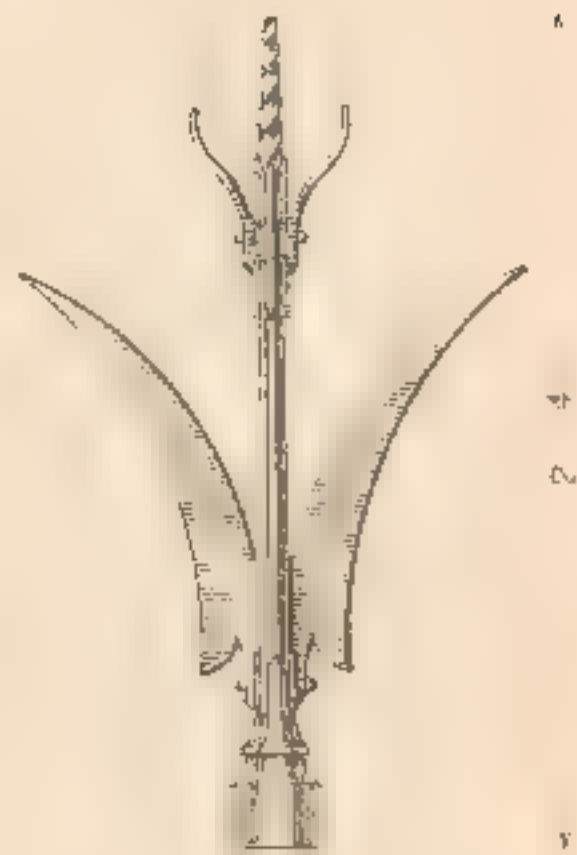


No. 160.



No. 160 can be made to any required bevel.

No. 12.



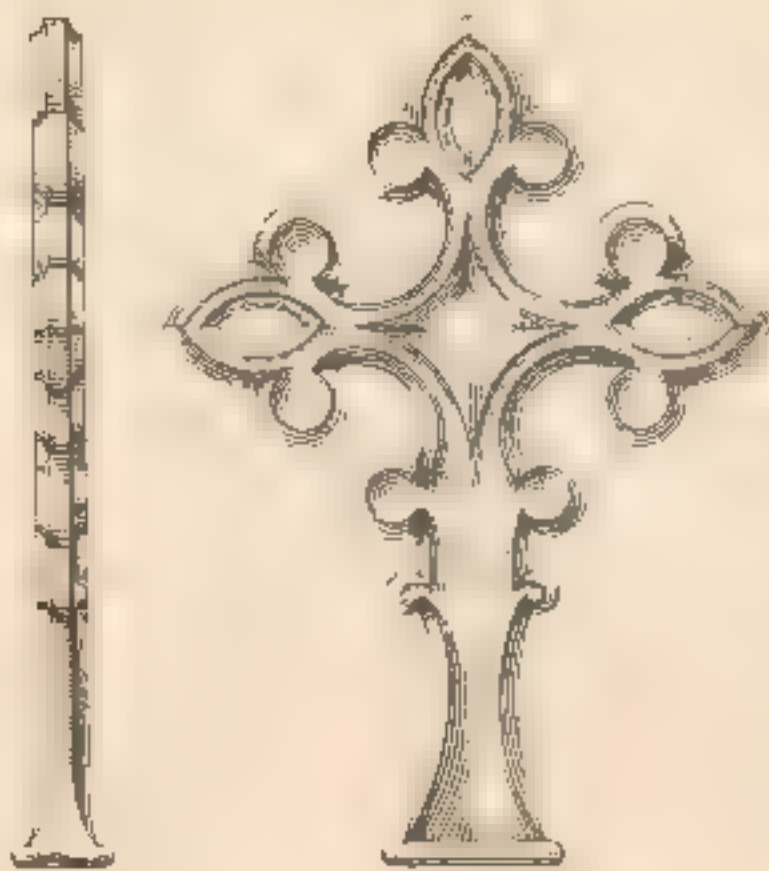
ARMS 2 AND 4 WAYS

No. 38

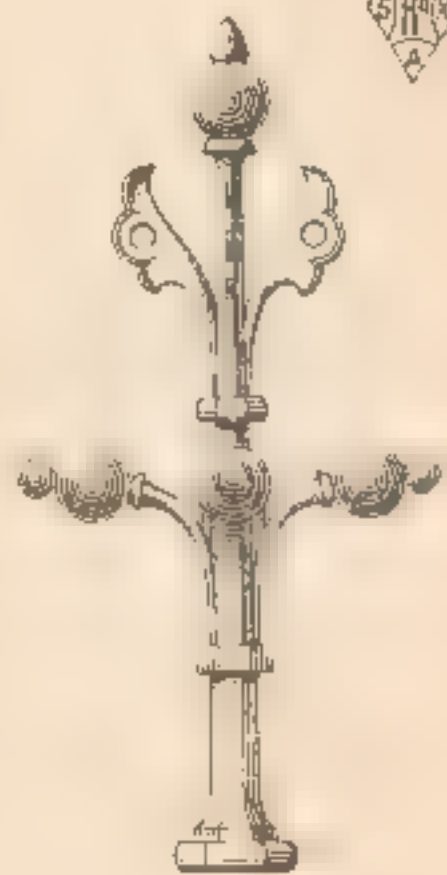


ARMS 2 AND 4 WAYS

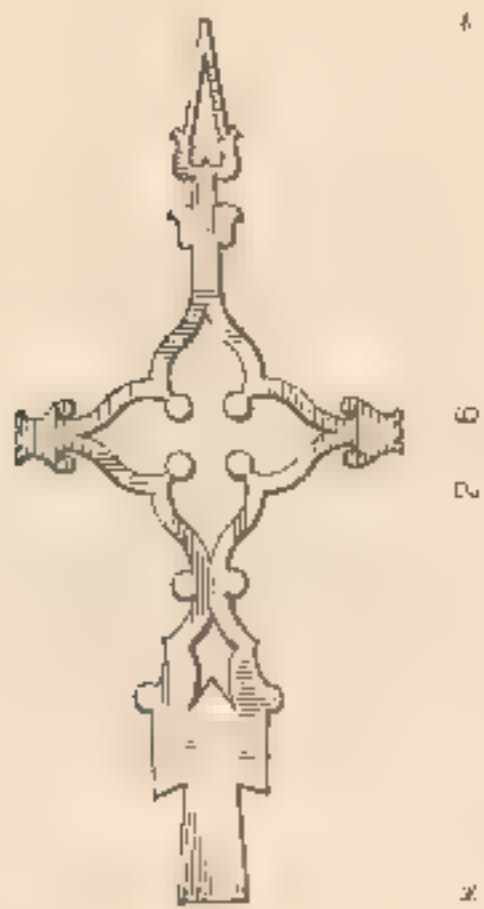
No. 42



No. 2.

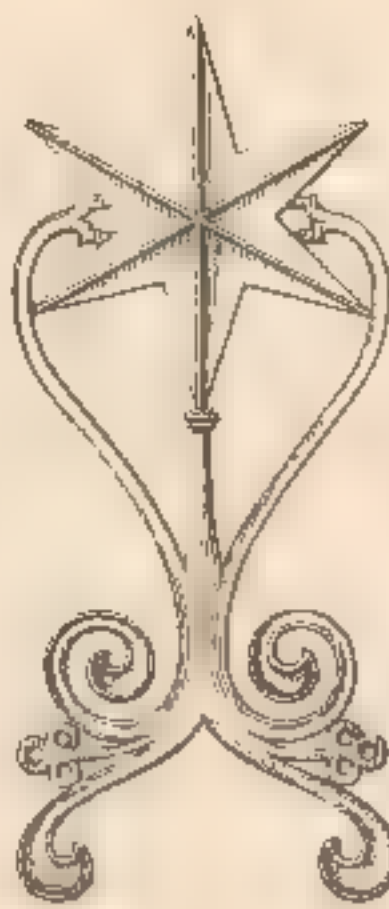


No. 5.



ARMS 2 WAYS

No. 3



No. 5



ARMS 4 WAYS

SCALE INCH — 1 FOOT

MACFARLANE'S TERMINALS &c

No 17



A
2 6
Y

No 32



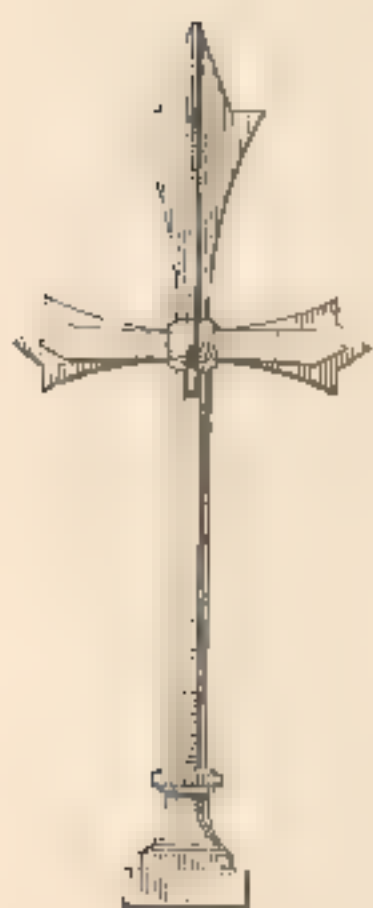
A
2 6
Y

No 47



A
2 6
Y

No 75



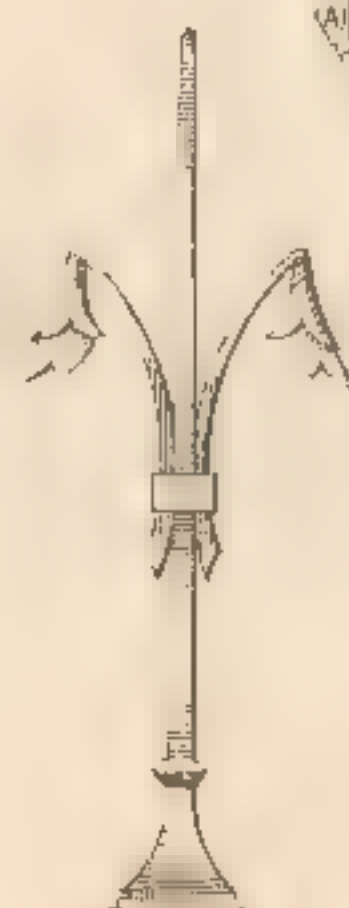
A
2 6
Y

No 77



A
2 6
Y

No 86



A
2 6
Y

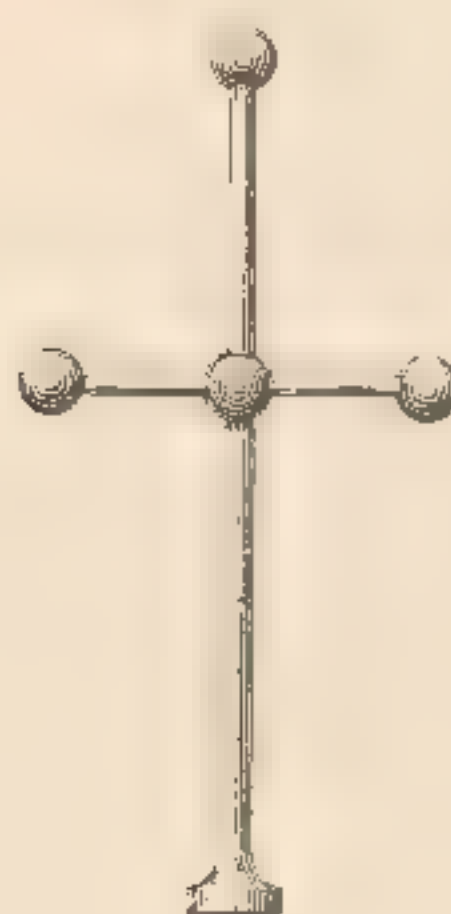
ARMS 2 AND 4 WAYS

No 83



A
2 6
Y

No 83



A
2 6
Y

ARMS 2 AND 4 WAYS

No 86



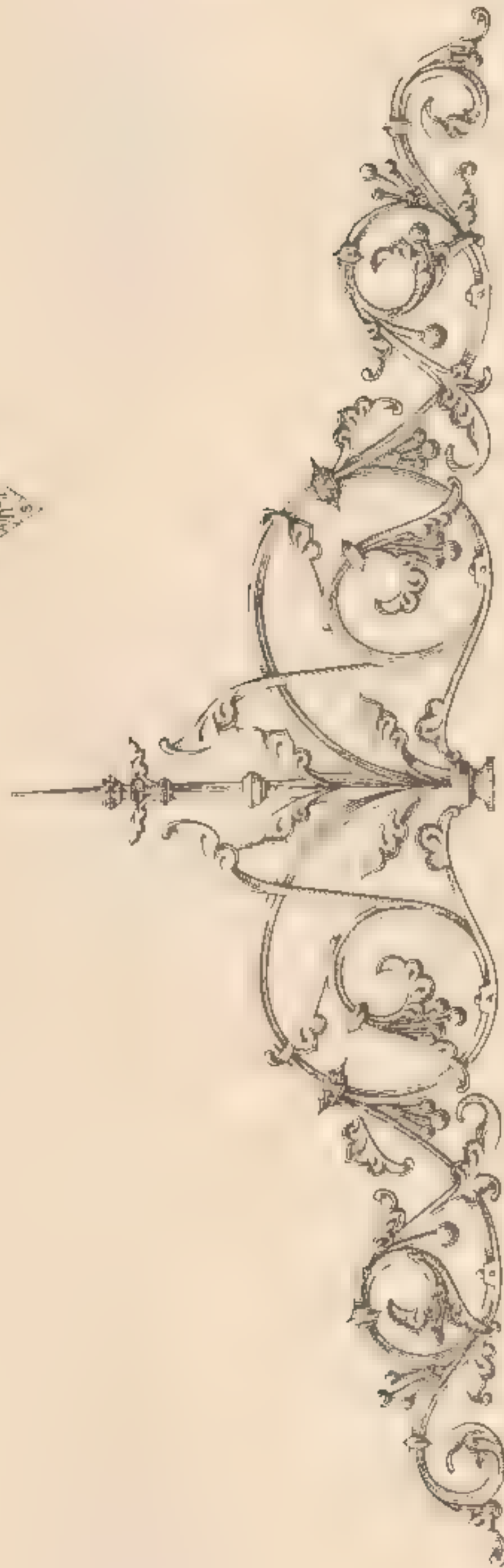
A
2 6
Y

ARMS 2 AND 4 WAYS

SCALE 1 INCH = 1 FOOT

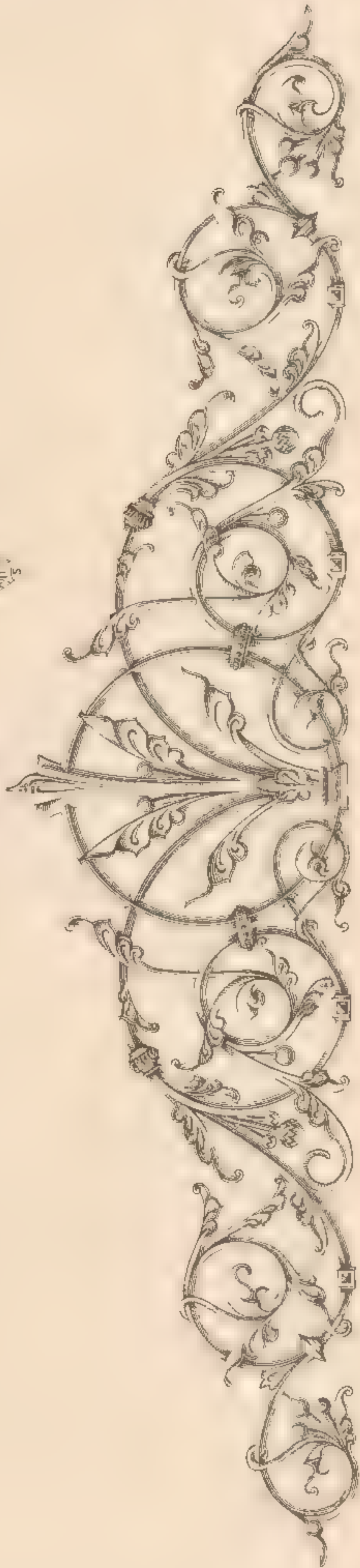
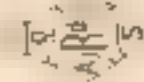
14 "AR. A. E." TERMINALS & C

N 44



B 0

Nº 62



b

14 "AR. A. E." TERMINALS & C

MACFARLANE'S TERMINALS &c

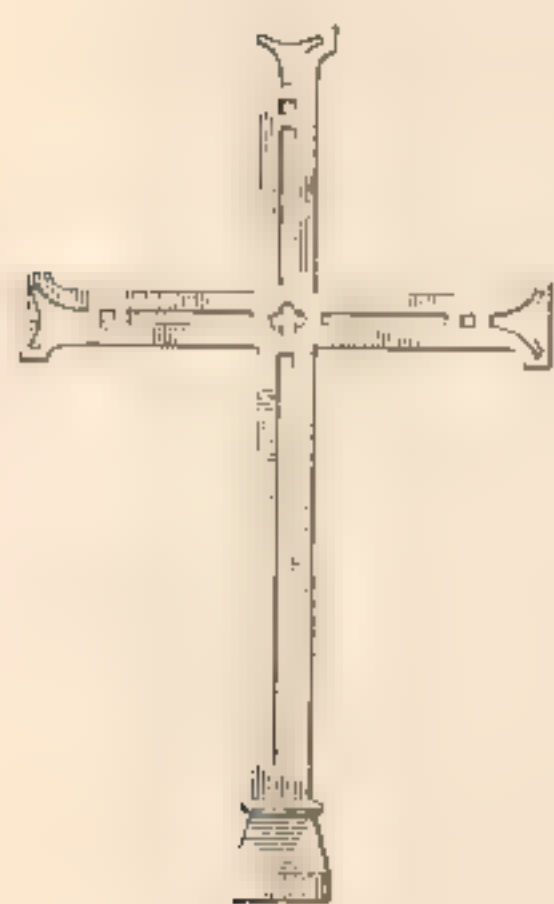
No 144

7
9
11
13



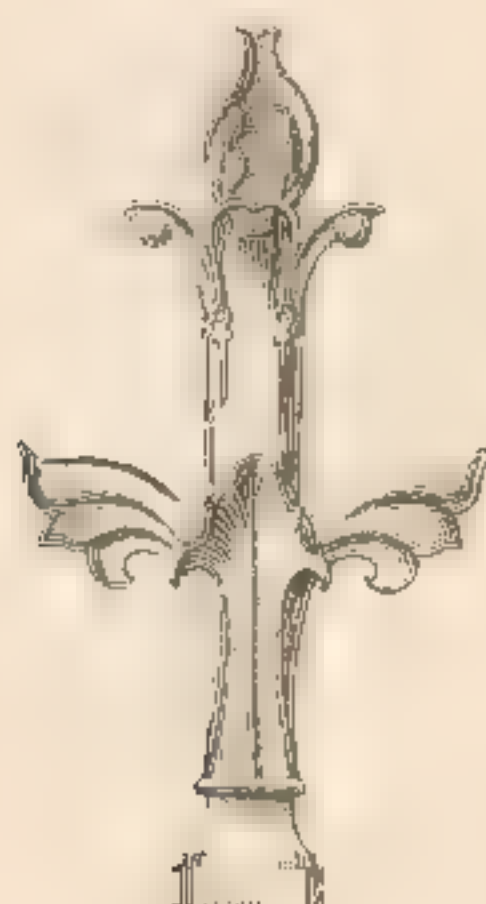
9

No 48



2
6

No 49



2
6

No 50

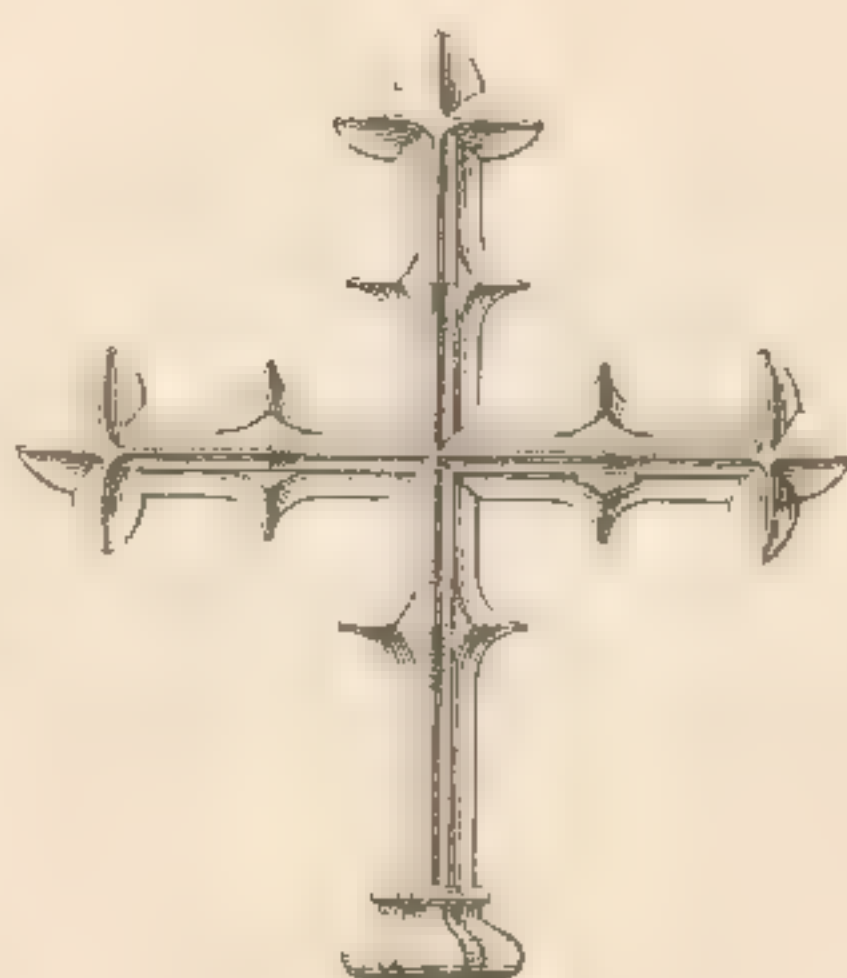


2
6

No 62



No 41



2
B

No 7

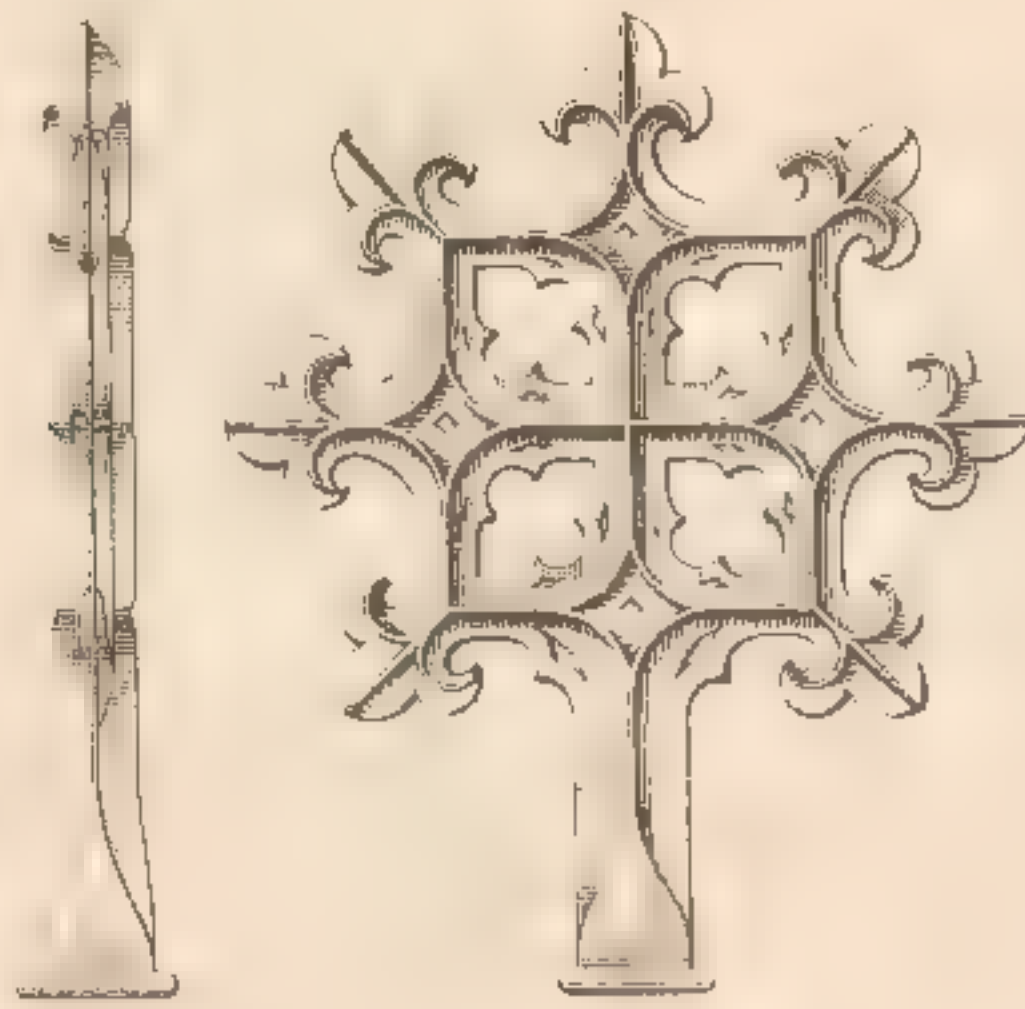
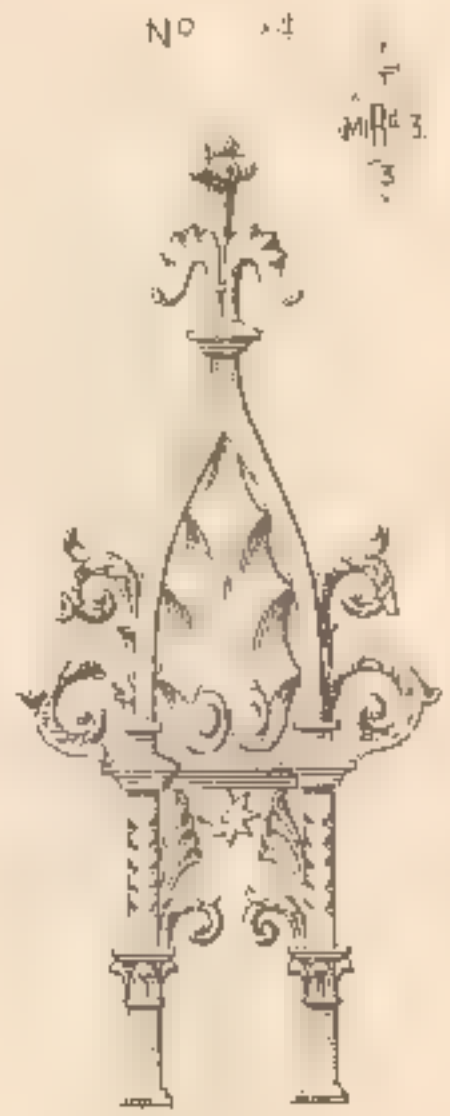
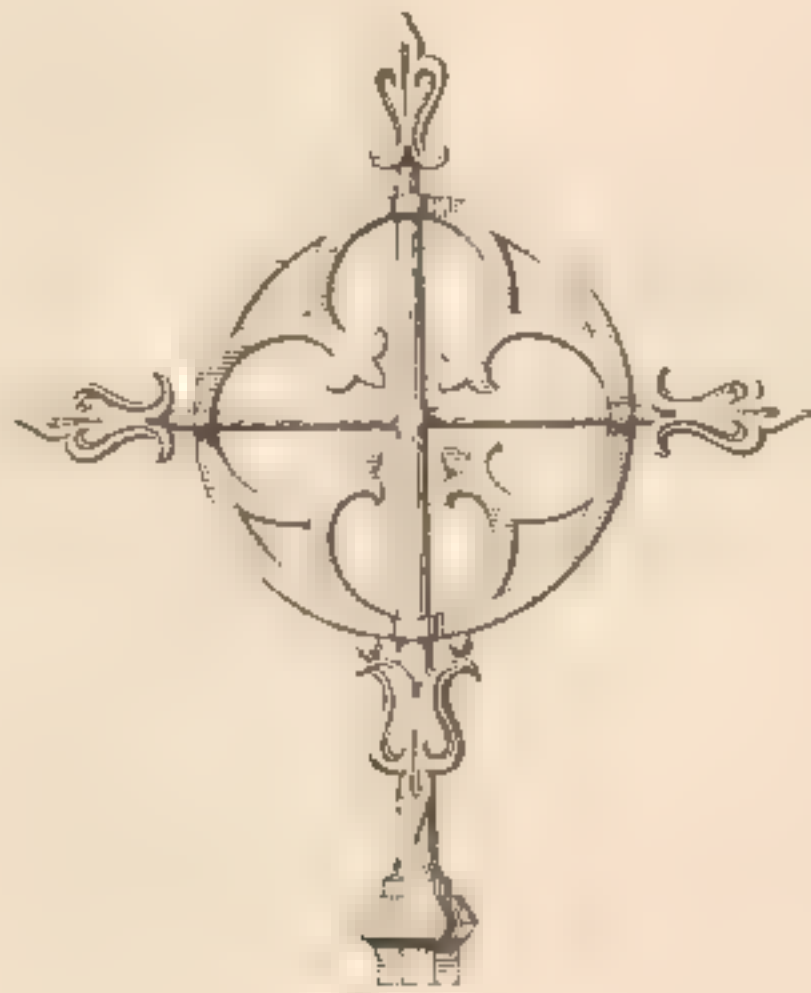
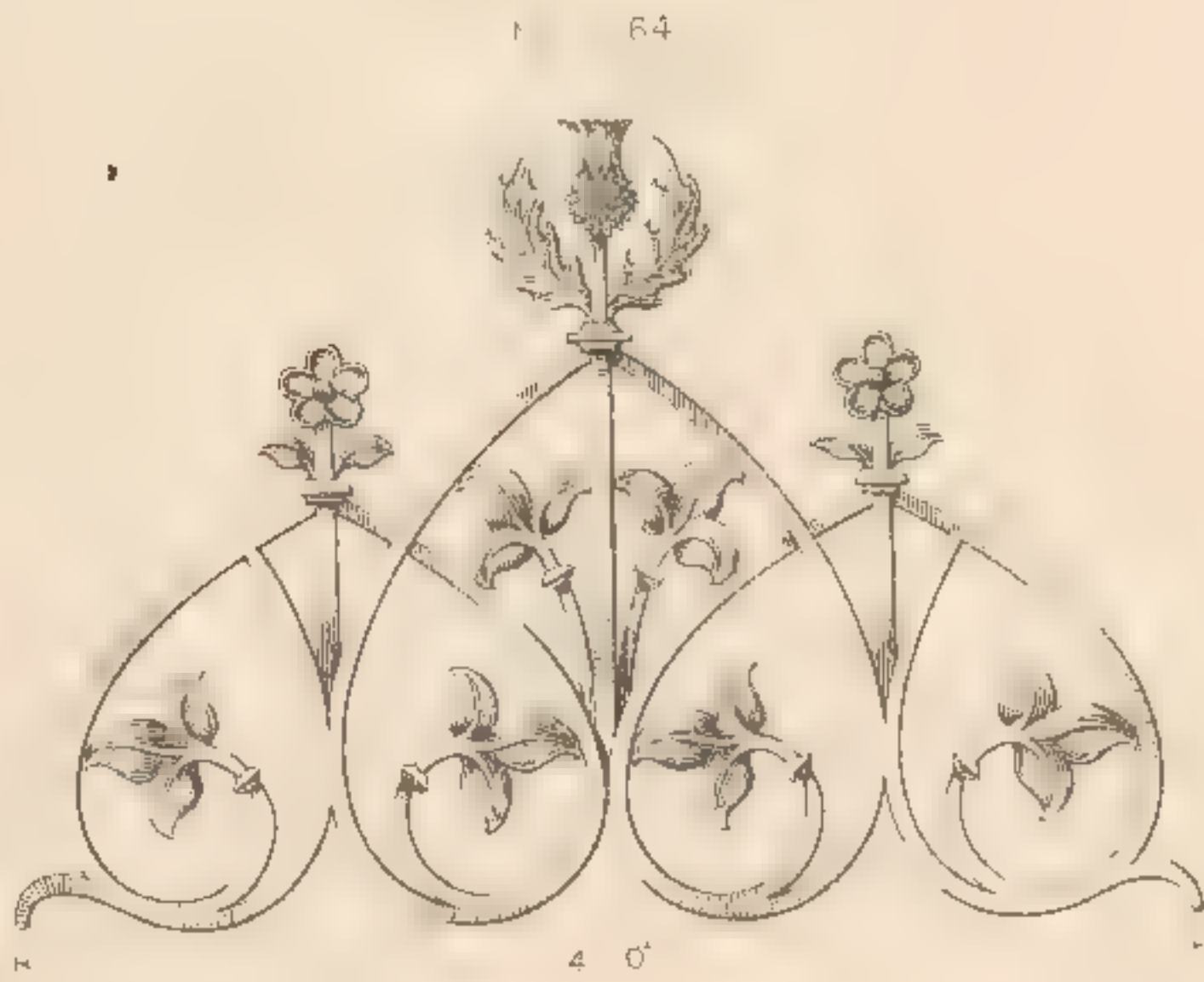
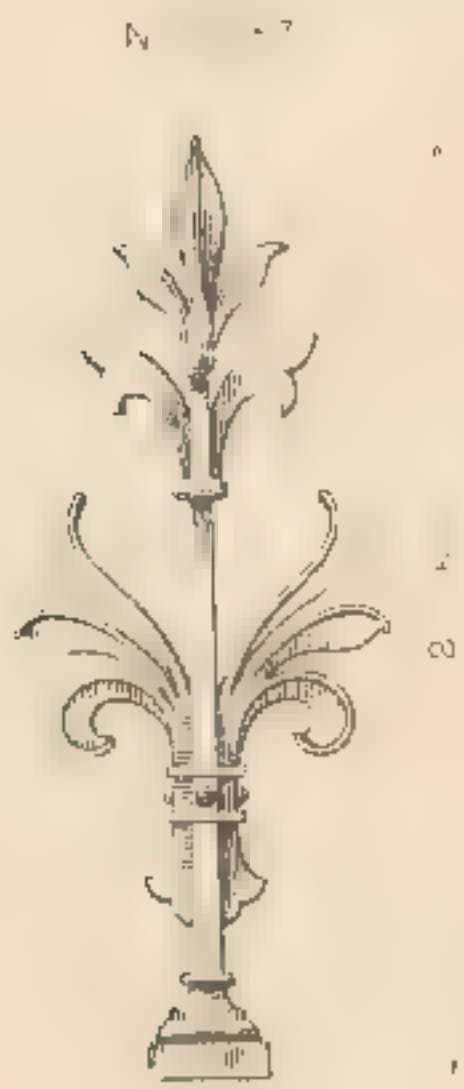


2
B

ARMS 2 AND 4 WAYS

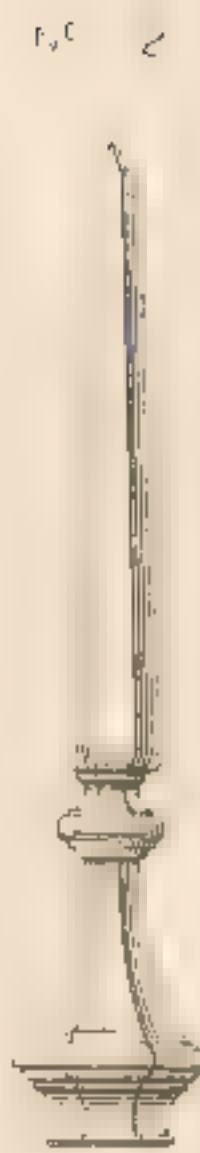
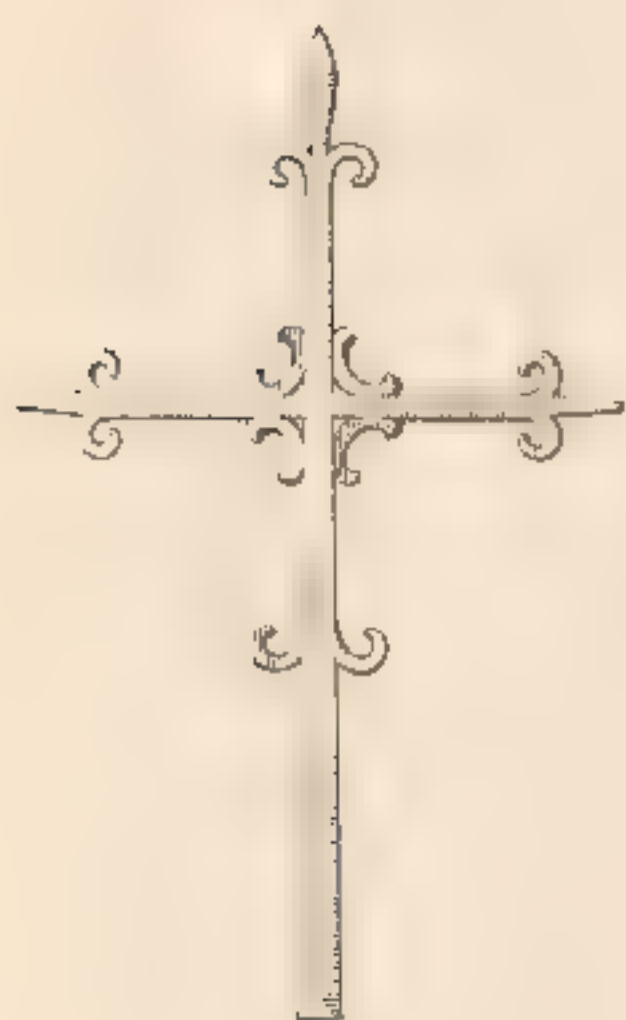
SCALE 1 INCH = 1 FOOT

MACFARLANE'S TERMINALS &c

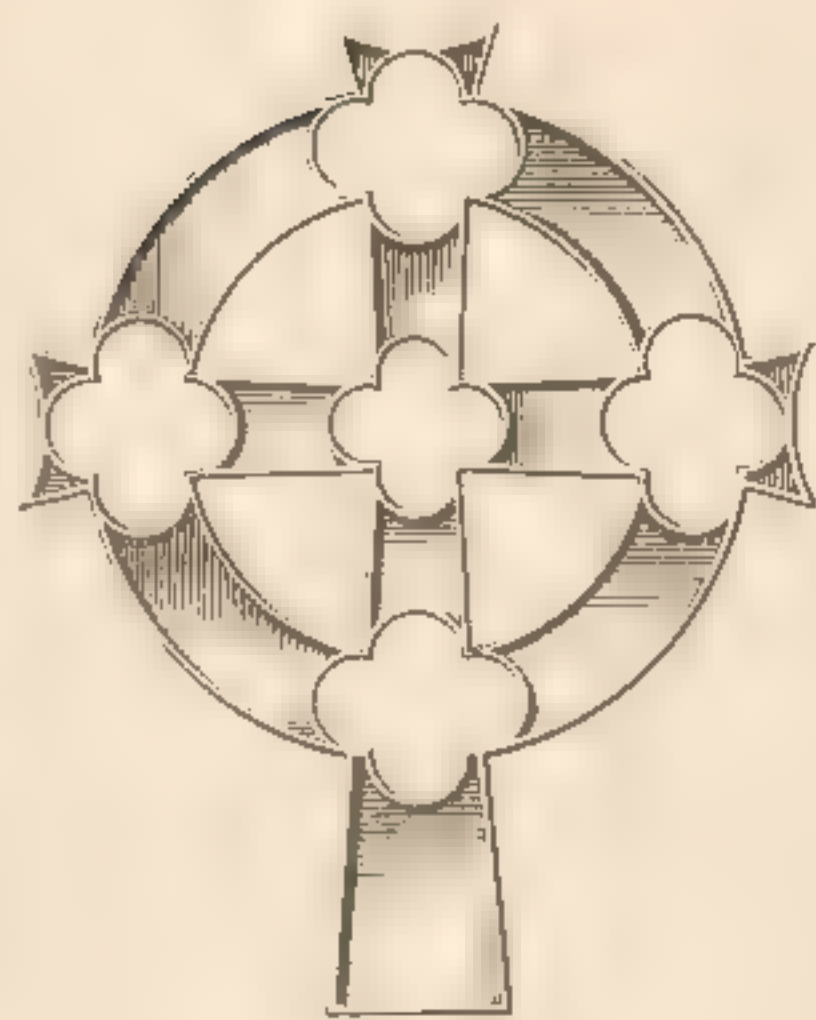


MACFARLANE'S TERMINALS &c

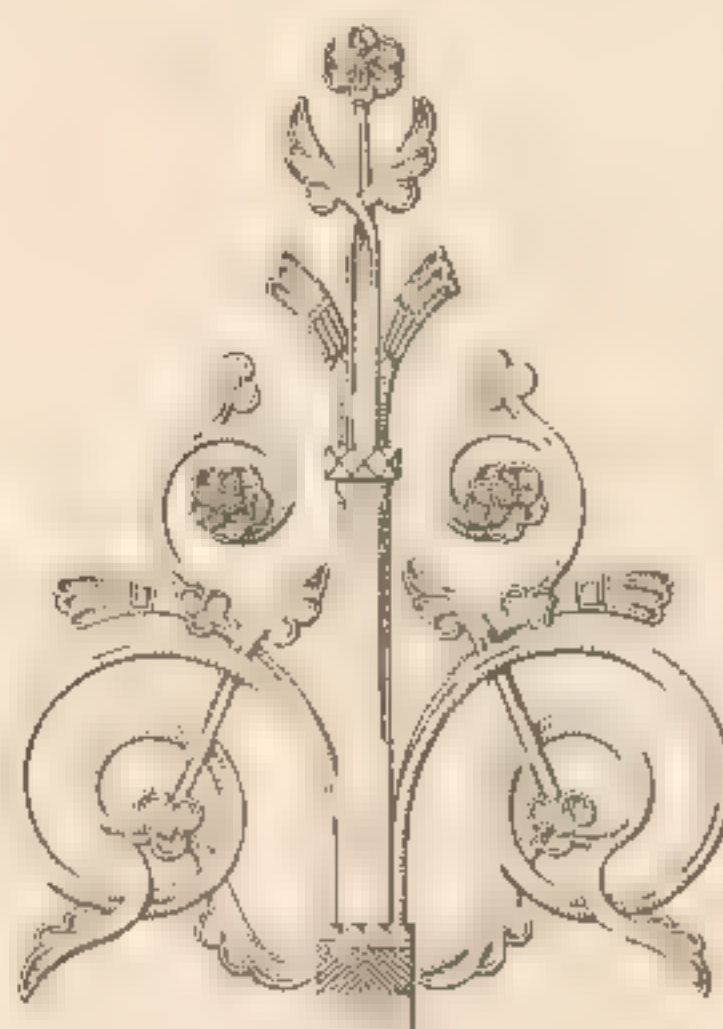
Nº 236



Nº 37



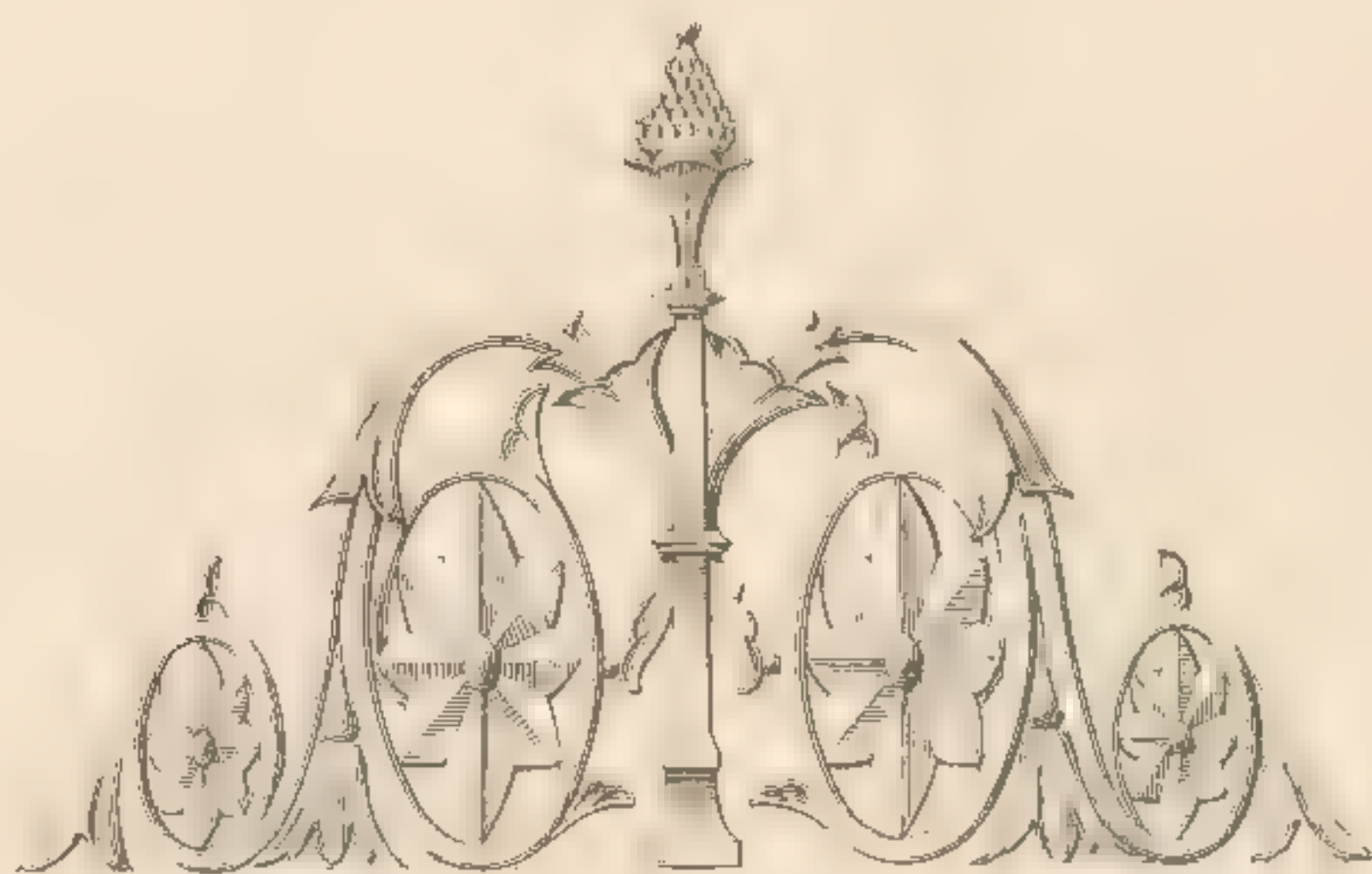
Nº 4



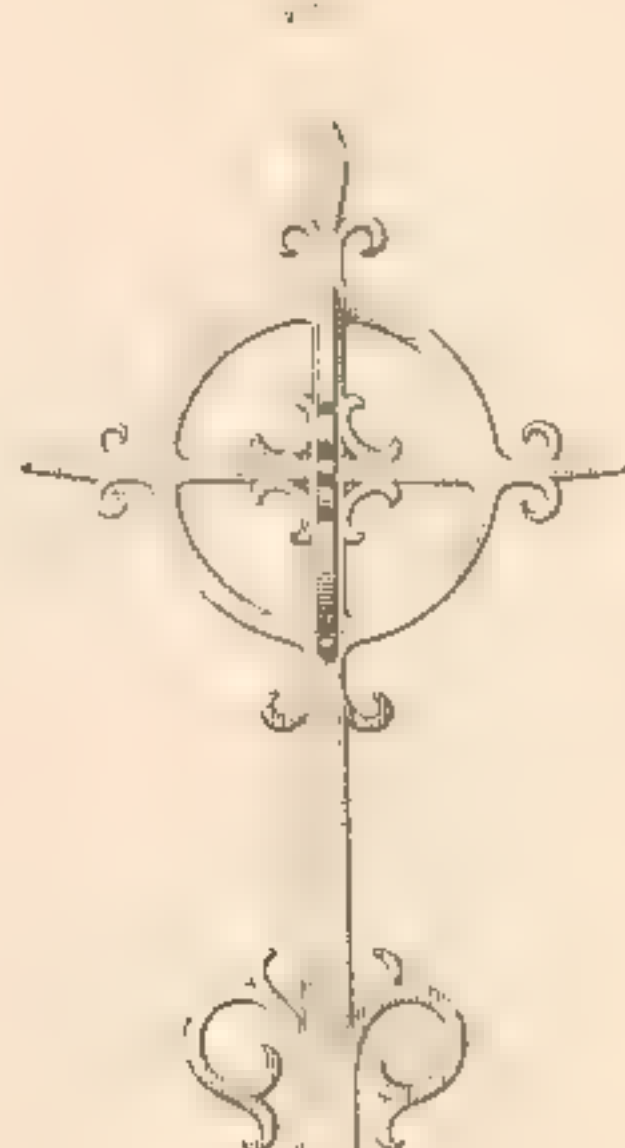
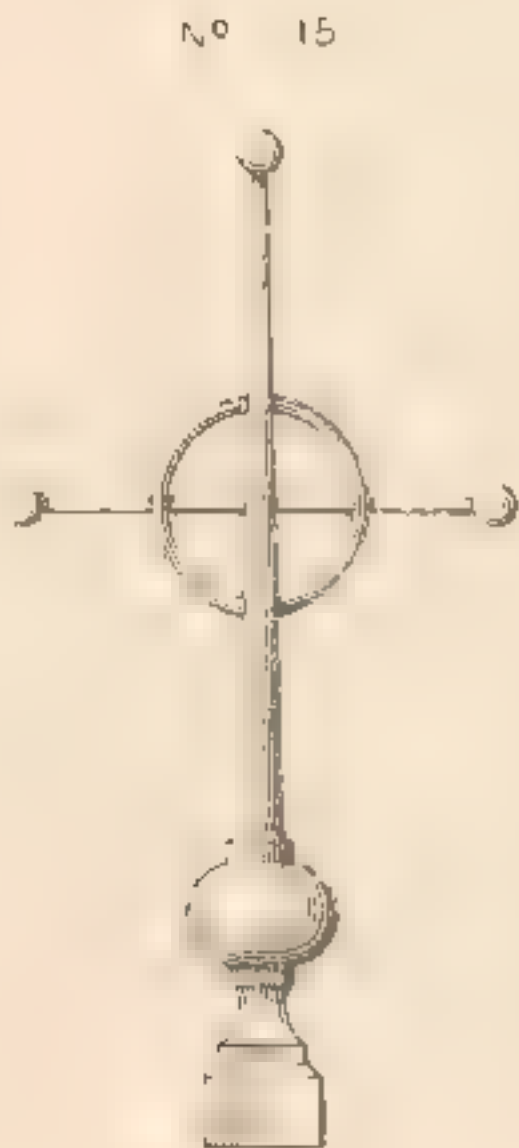
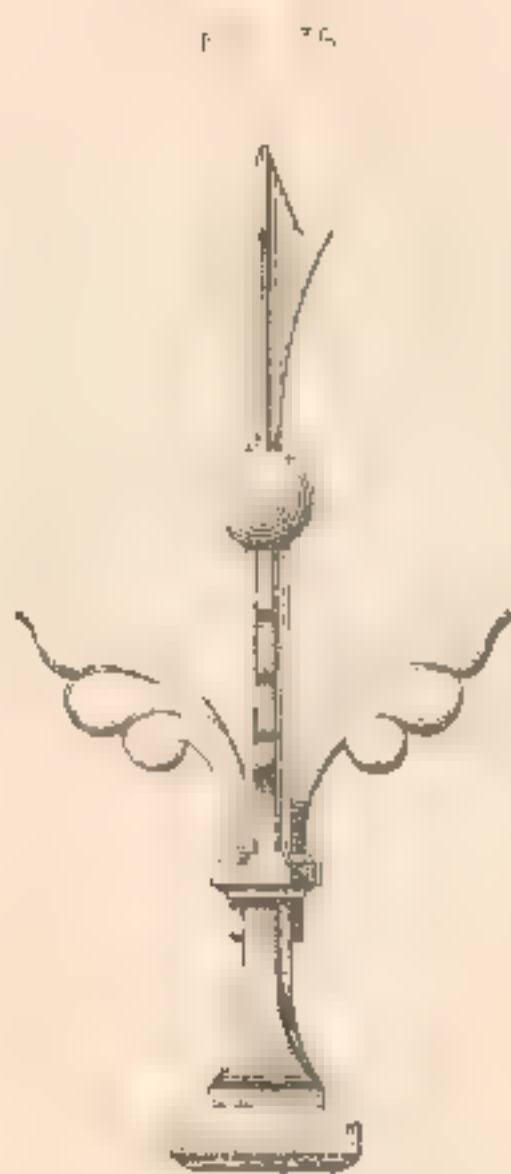
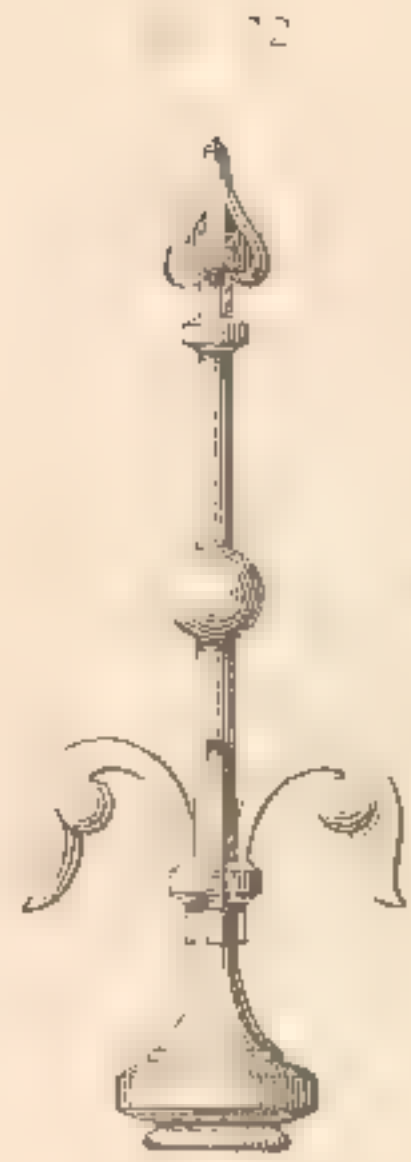
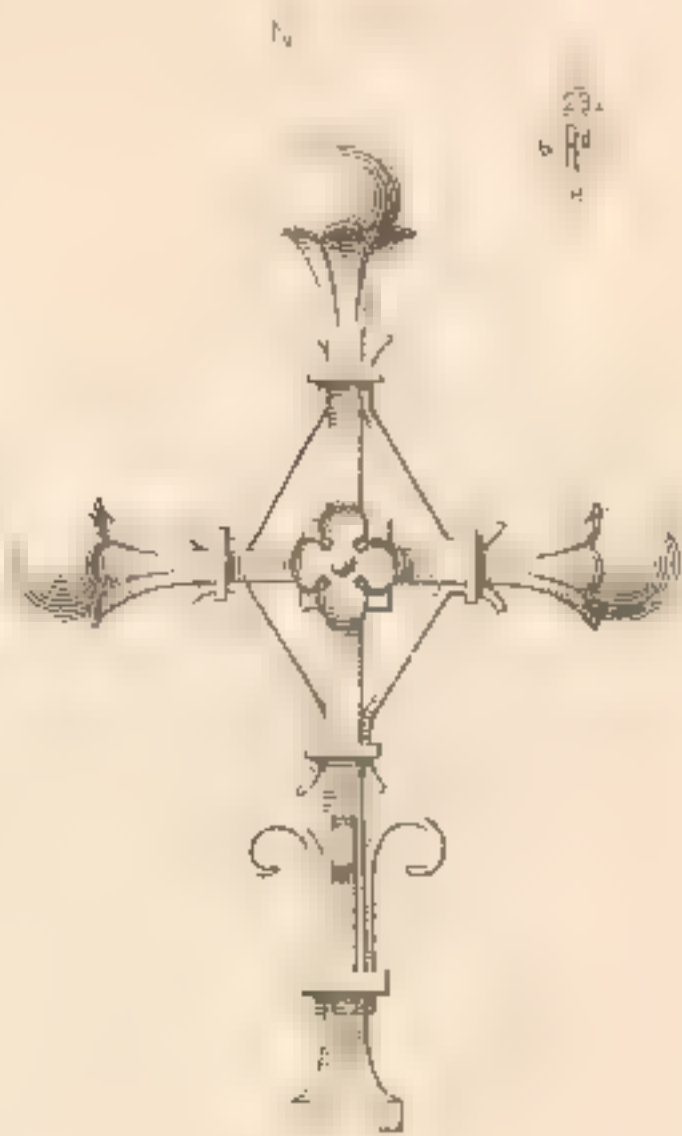
Nº 2



Nº 3



MACFARLANE'S TERMINALS &c



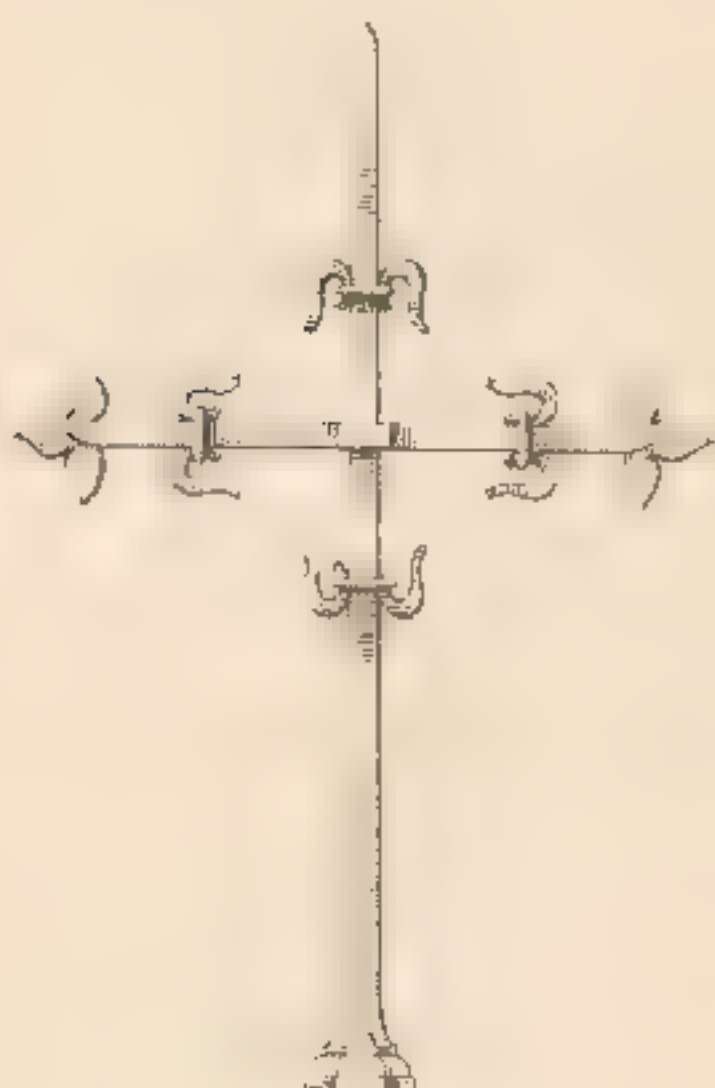
3 0'

MACFARLANE'S TERMINALS &c

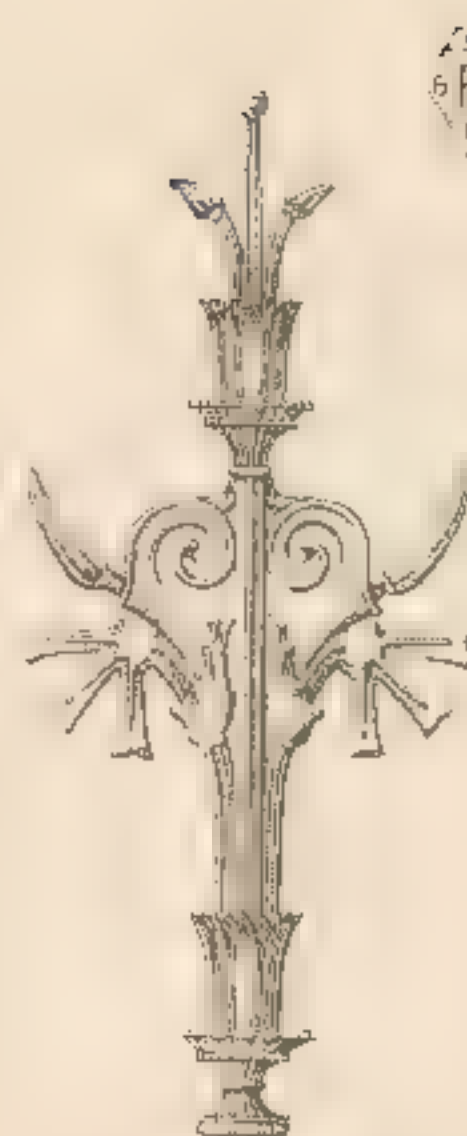
Nº 22



Nº 26



Nº 78

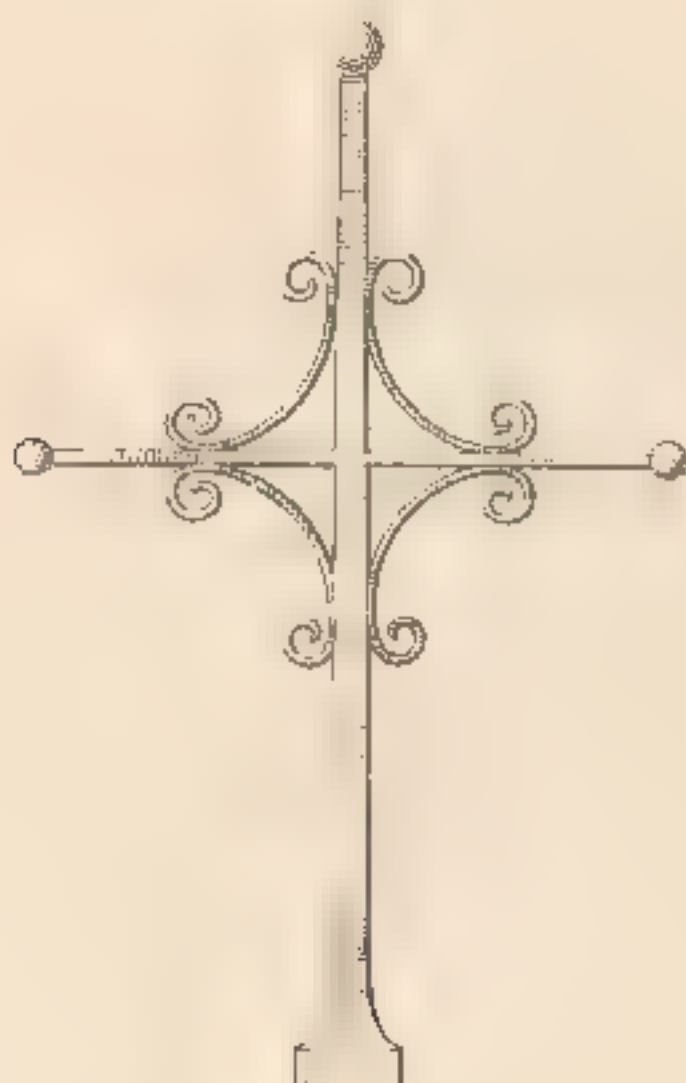


ARMS 2 AND 4 WAYS

Nº 32



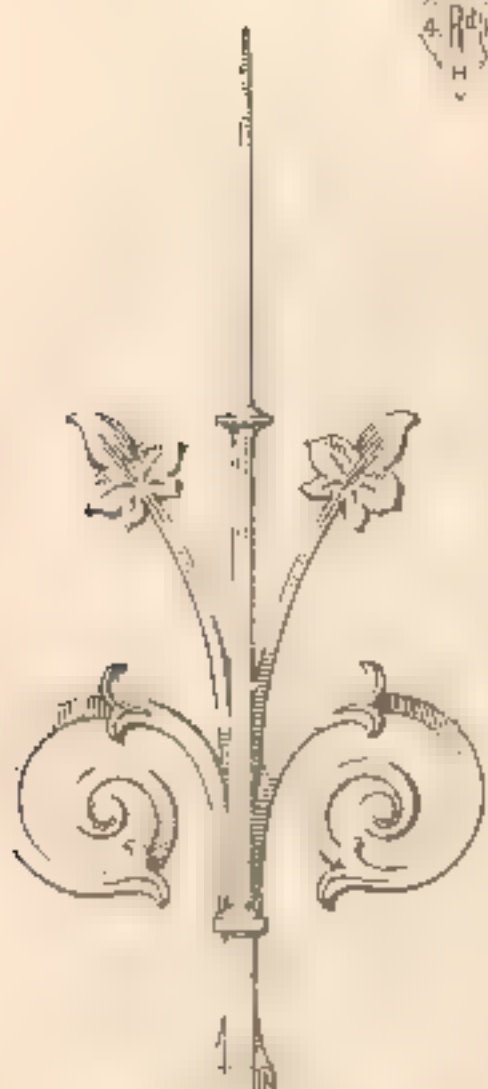
Nº 68



Nº 80

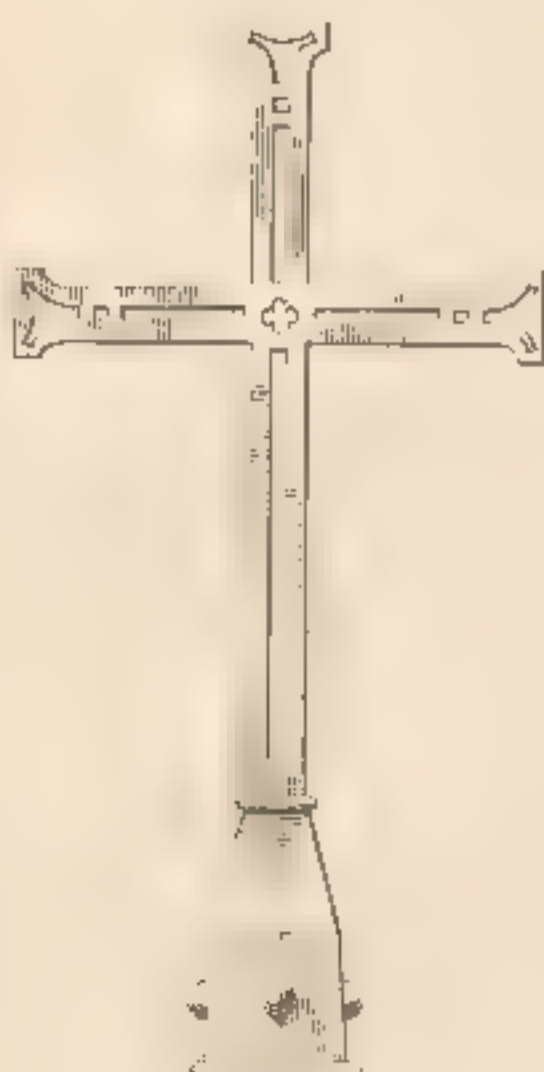


Nº 37

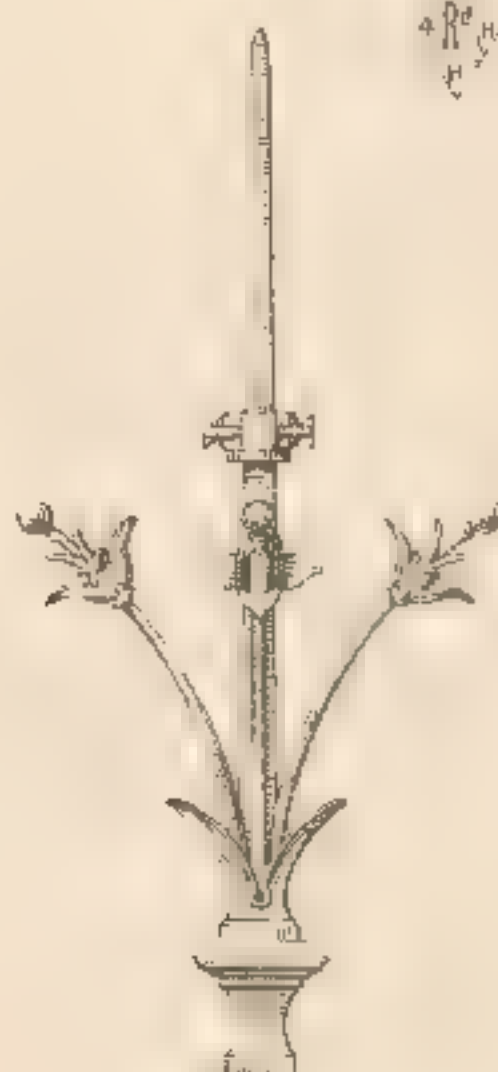


ARMS 2 AND 4 WAYS

Nº 48



Nº 42



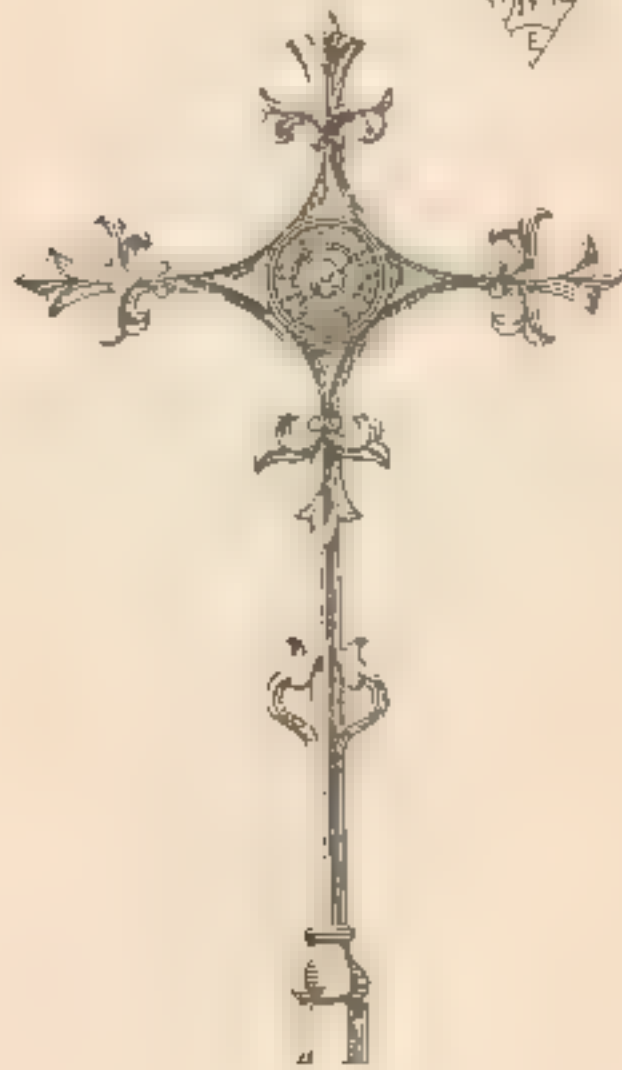
SCALE 1 INCH = FOOT

MAJESTY'S PATENT & CO

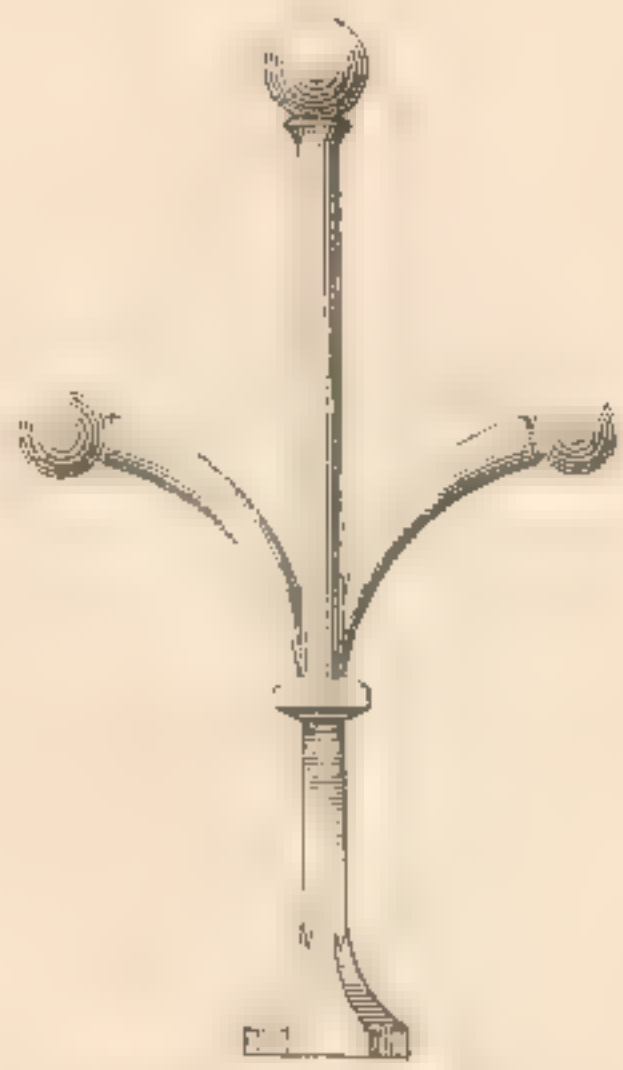
No 7



No 70

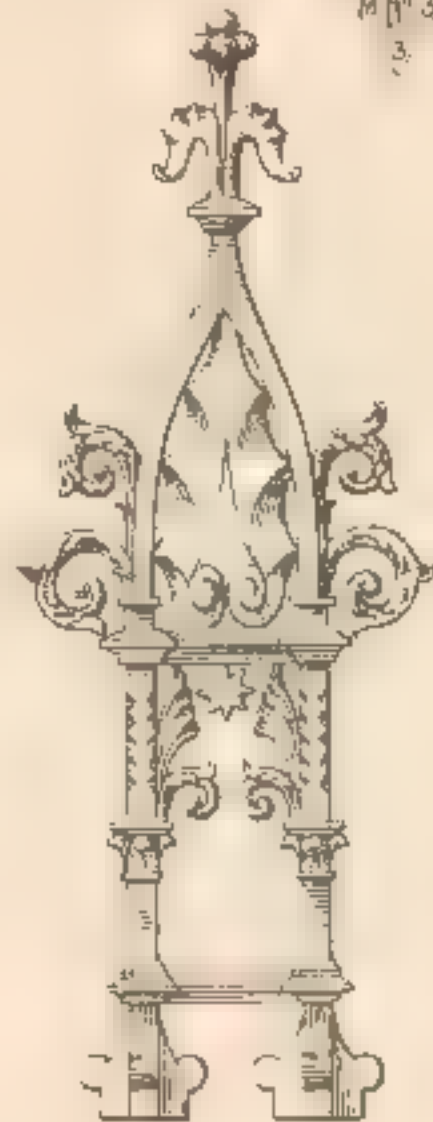


No 27

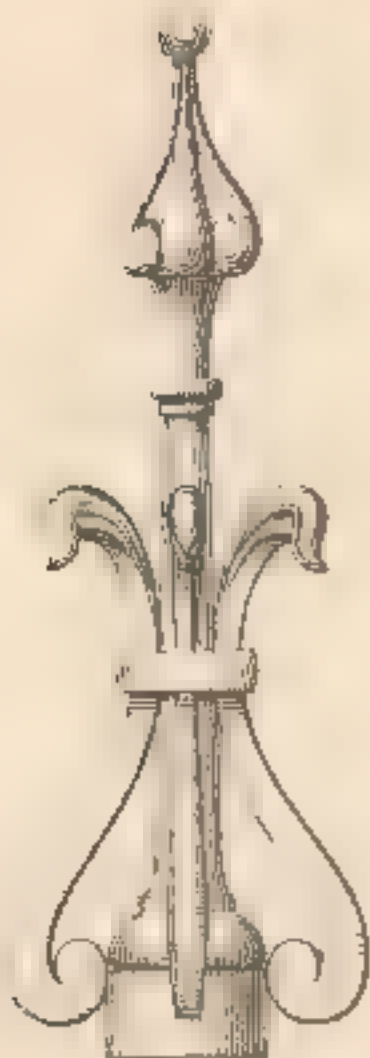


ARMS 2 AND 4 WA.S

No 94



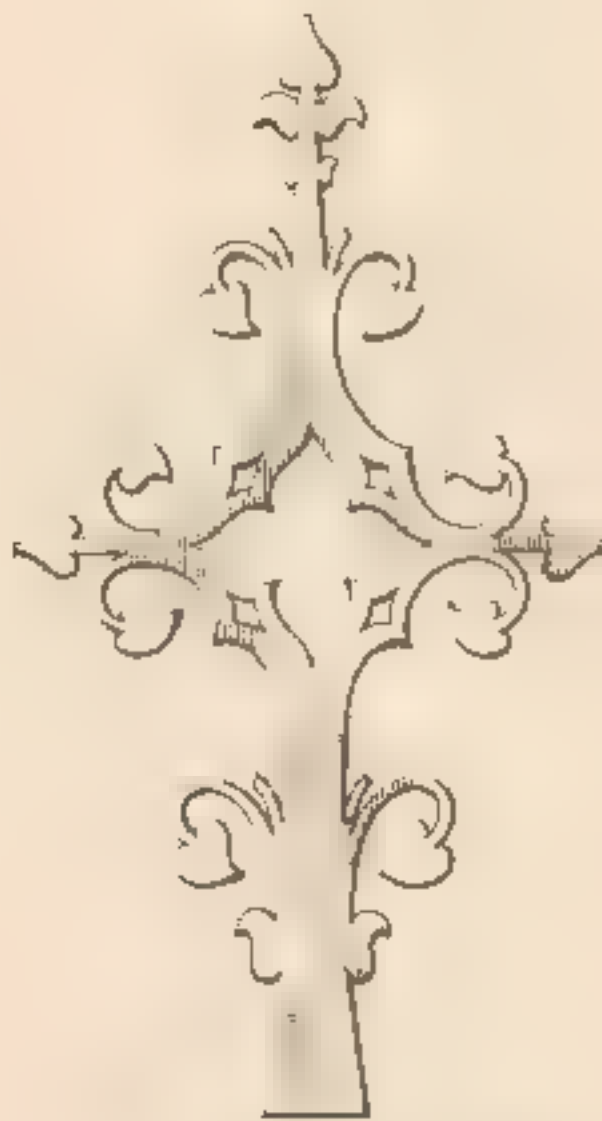
No 27



No 24

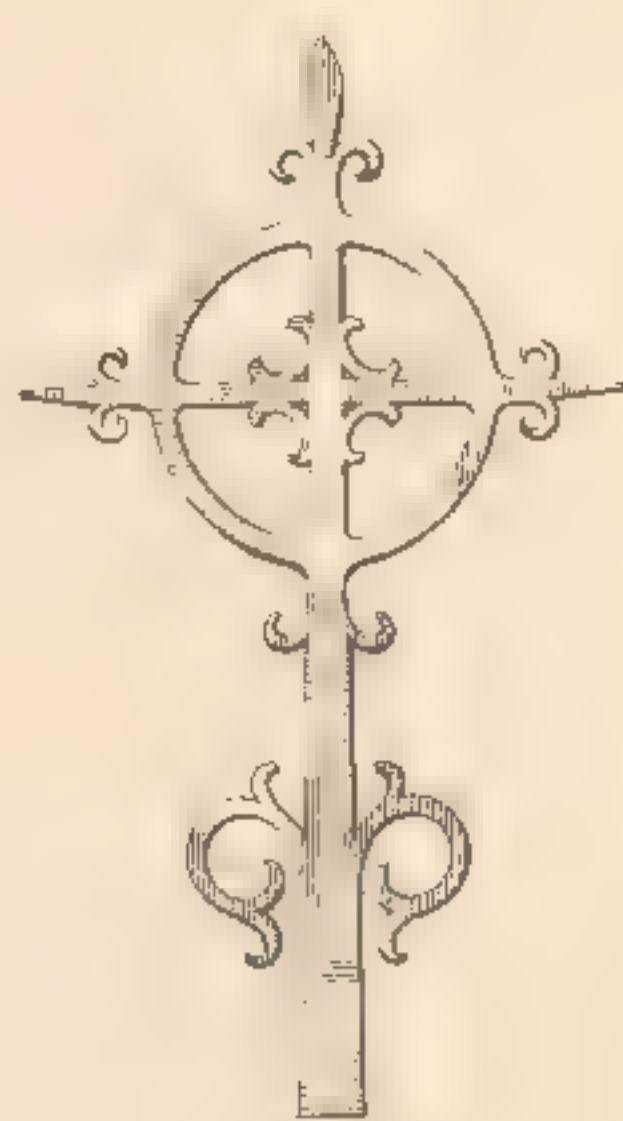


No 3

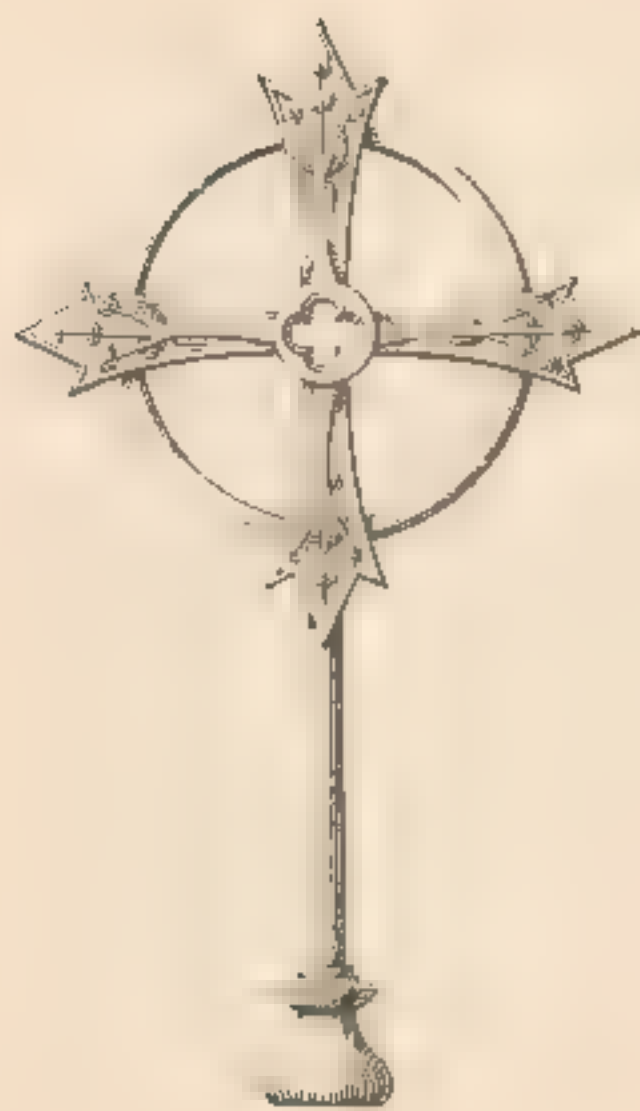


ARM 2 AND 4 WA

No 6



ARM 2 WA



ARM 2 WA

MACFARLANE'S TERMINALS &c

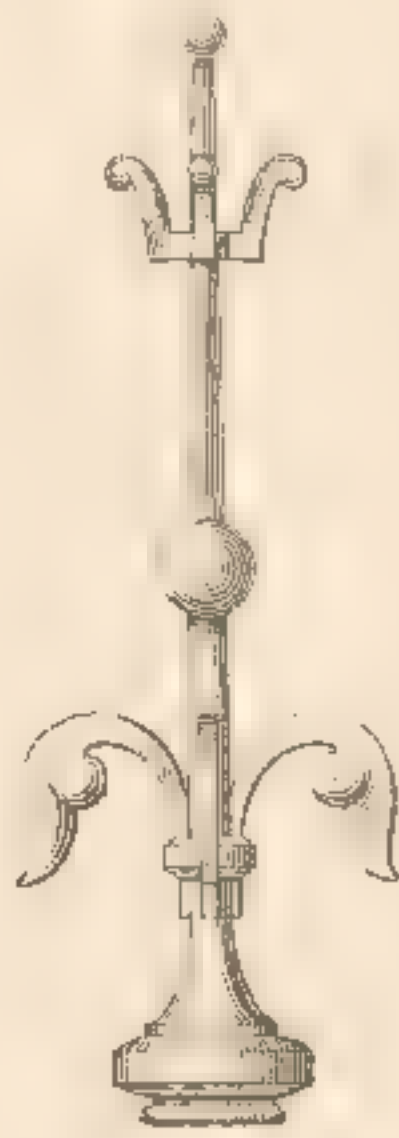
Nº 4



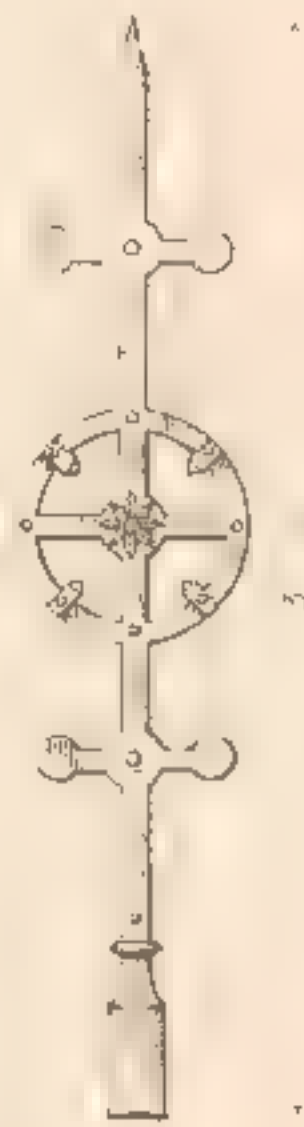
Nº 66



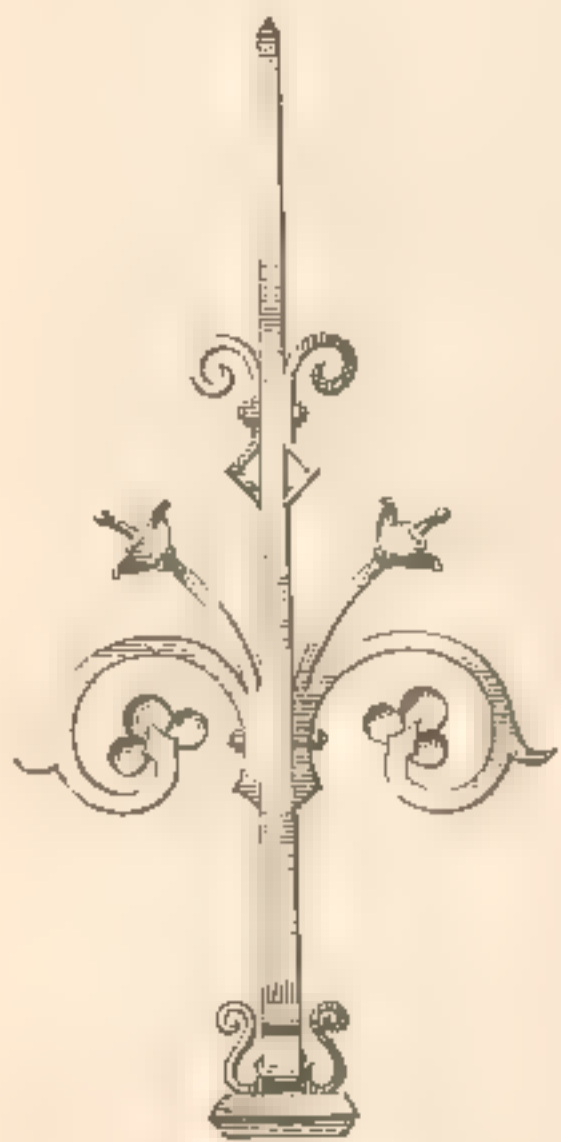
Nº 72



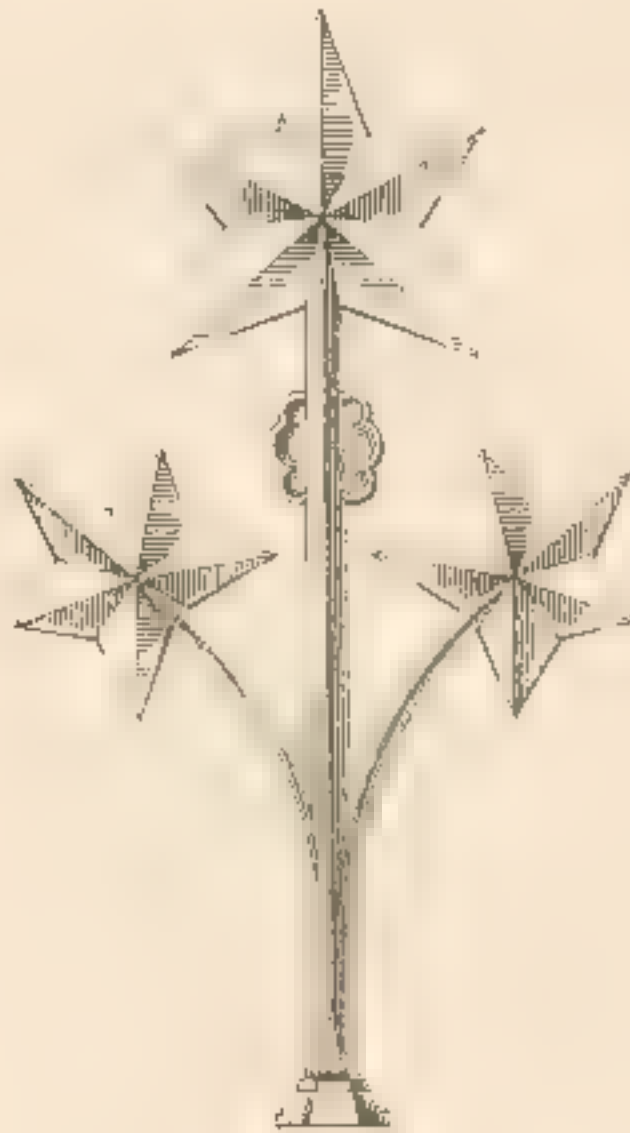
Nº 152



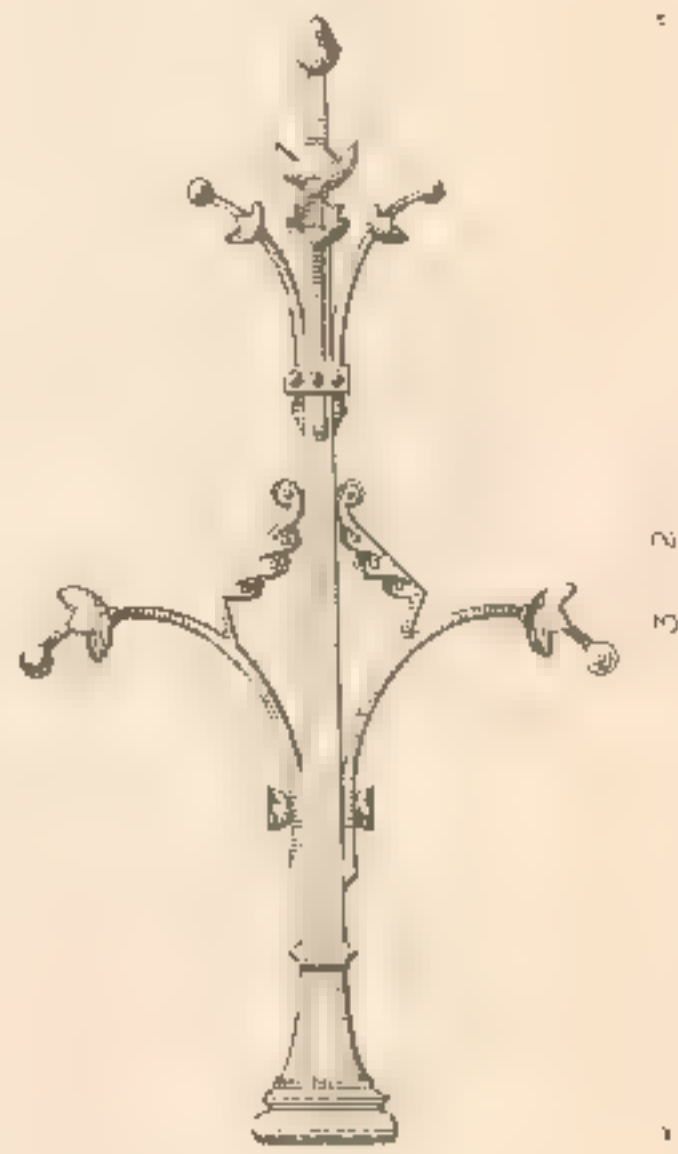
Nº 67



Nº 70



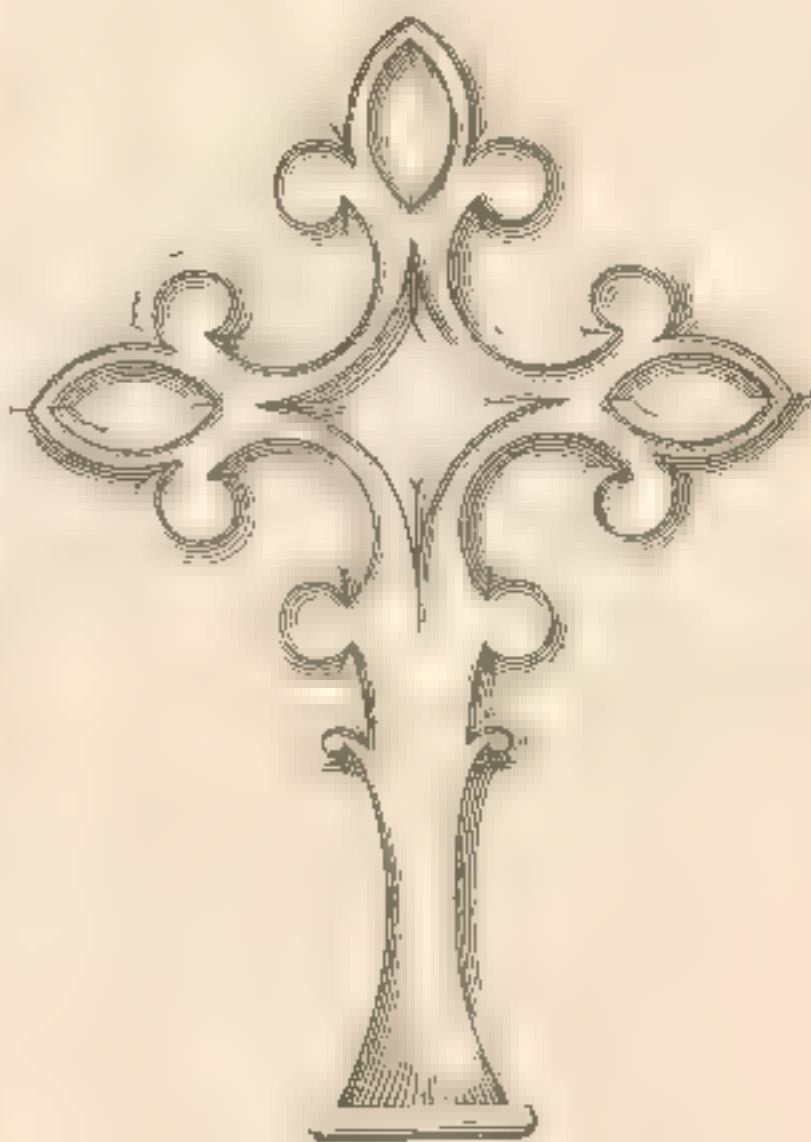
Nº 9



Nº 125



Nº 42



Nº 6



SCALE INCHES

MACFARLANE'S TERMINALS &c

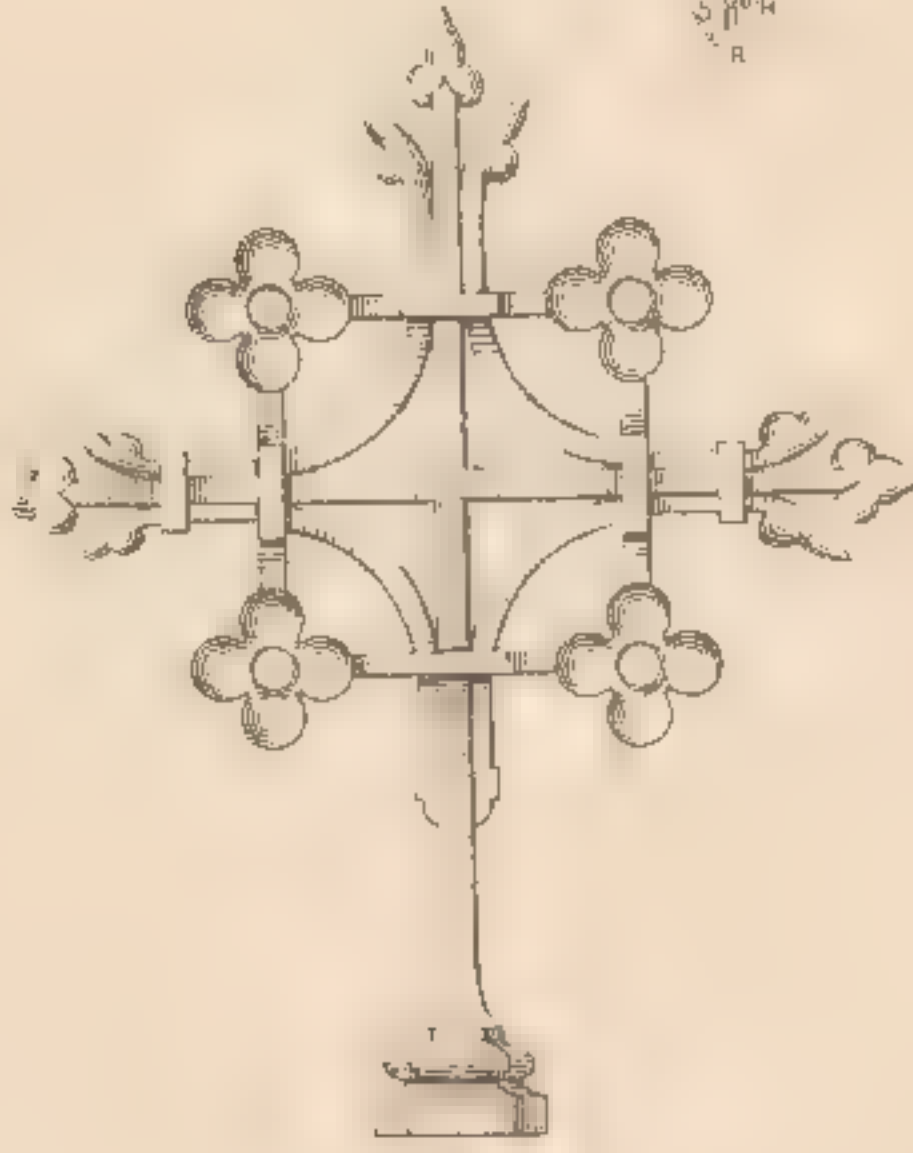
No. 67



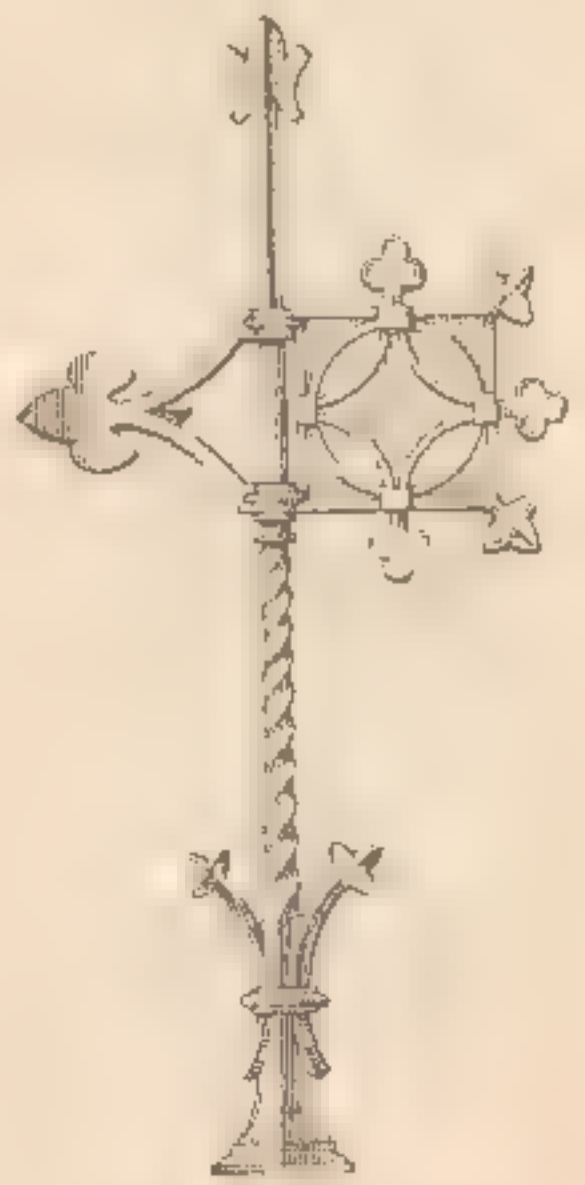
No. 68



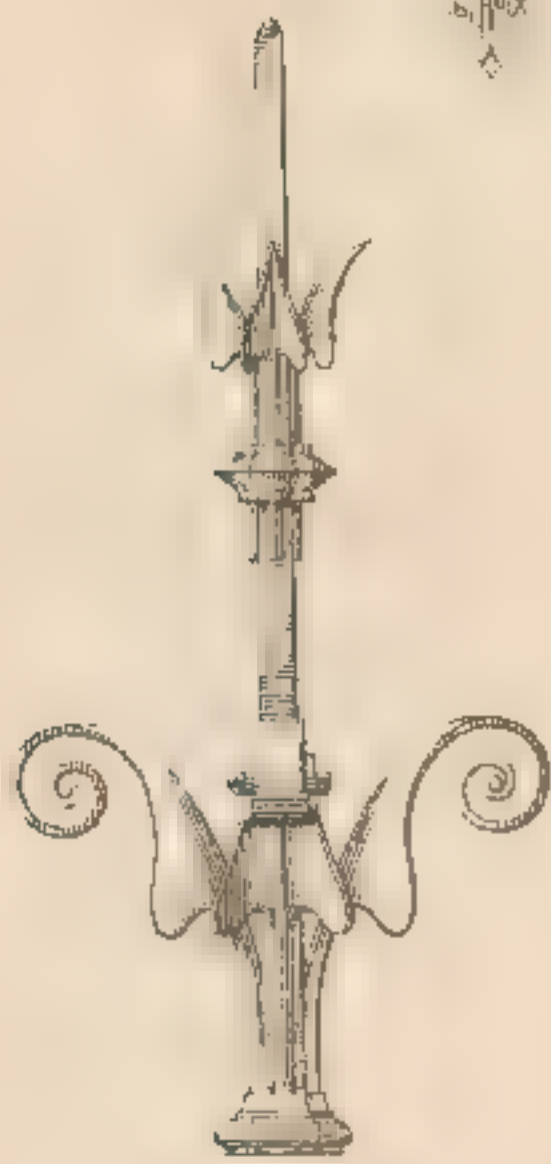
No. 69



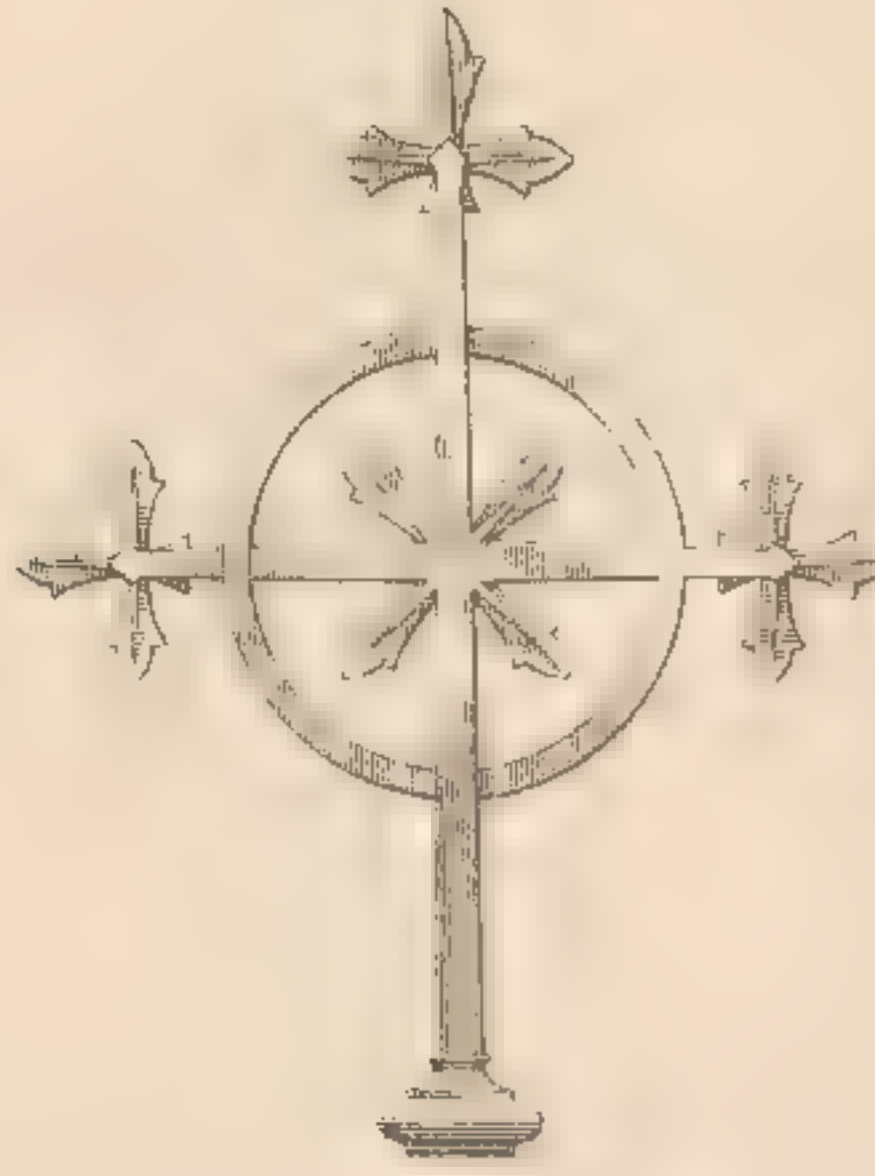
No. 70



No. 71



No. 72



No. 73



MACFARLANE'S TERMINALS &c

Nº 30



Nº 106 3 FT 3 IN HIGH

(1)
2 1/2
5 1/4
1 1/2



4

Nº 225

2 1/2
5 1/4
1 1/2



Nº 66 3 FT 3 IN HIGH

APCA

(1)
2 1/2
5 1/4
1 1/2

Nº 2



4



Nº 20



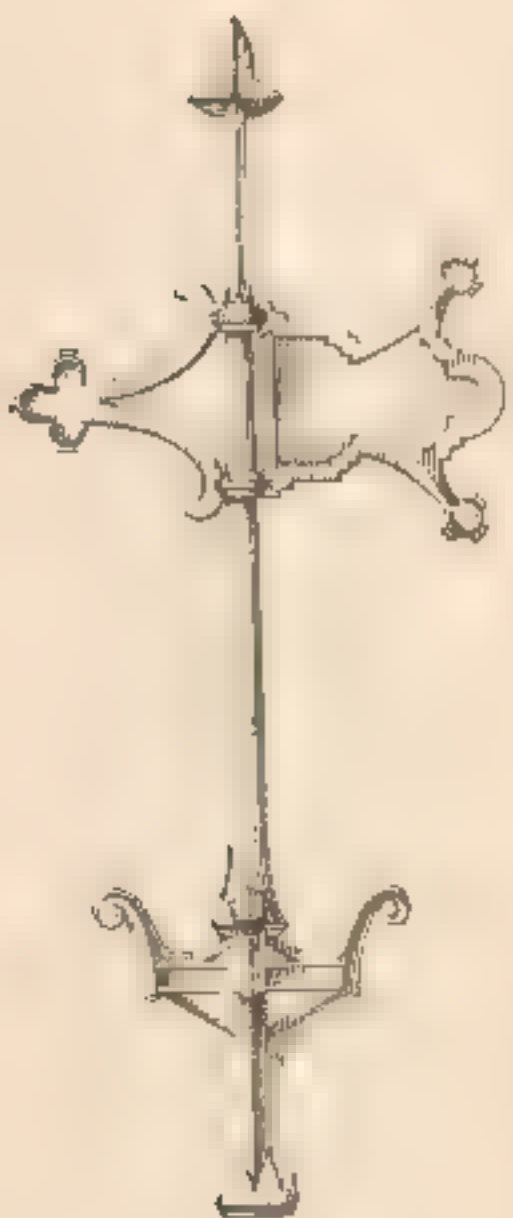
5

Nº 106 can be made to any required height

SCALE 1 INCH = 1 FOOT

MACFARLANE'S TERMINALS &c

Nº 50



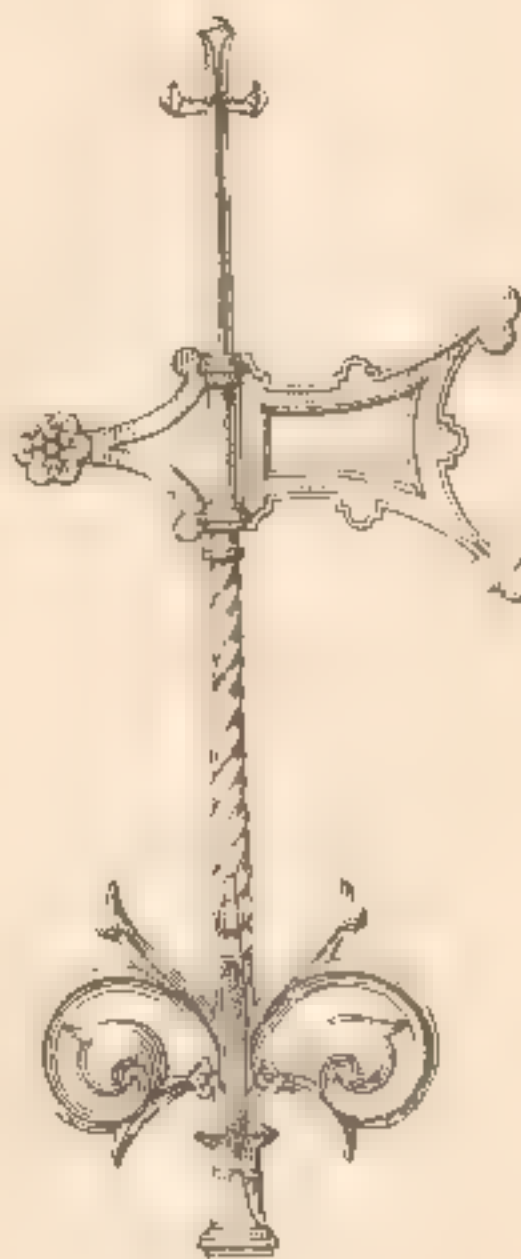
3 5

Nº 4



3 5

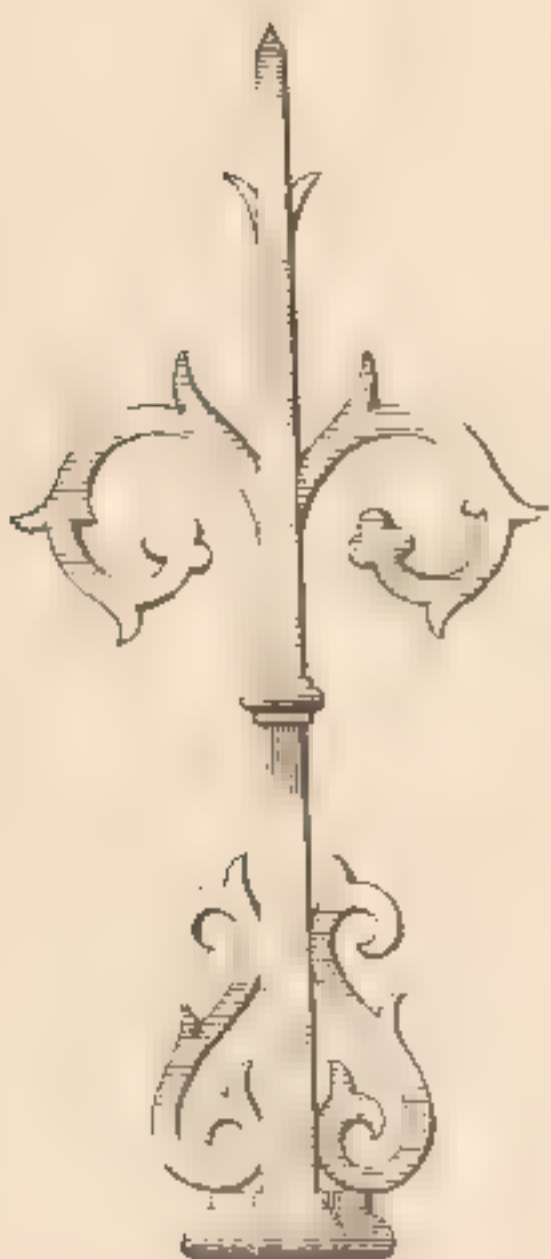
Nº 49



3 6

ARM. 2 AND 4 WAYS

Nº 1



3 5

Nº 4



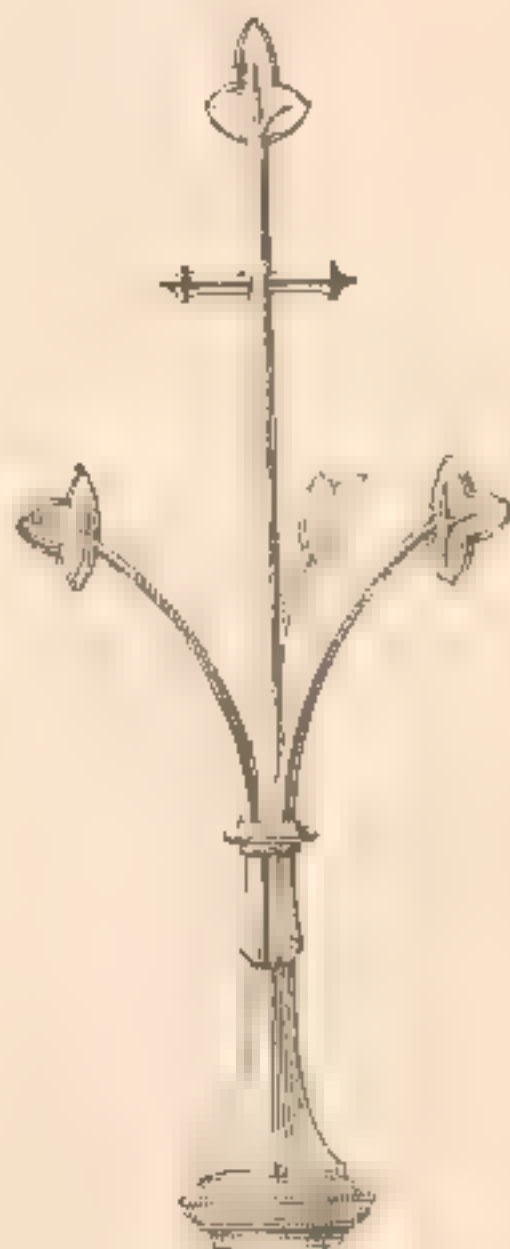
3 6

Nº 1



3 6

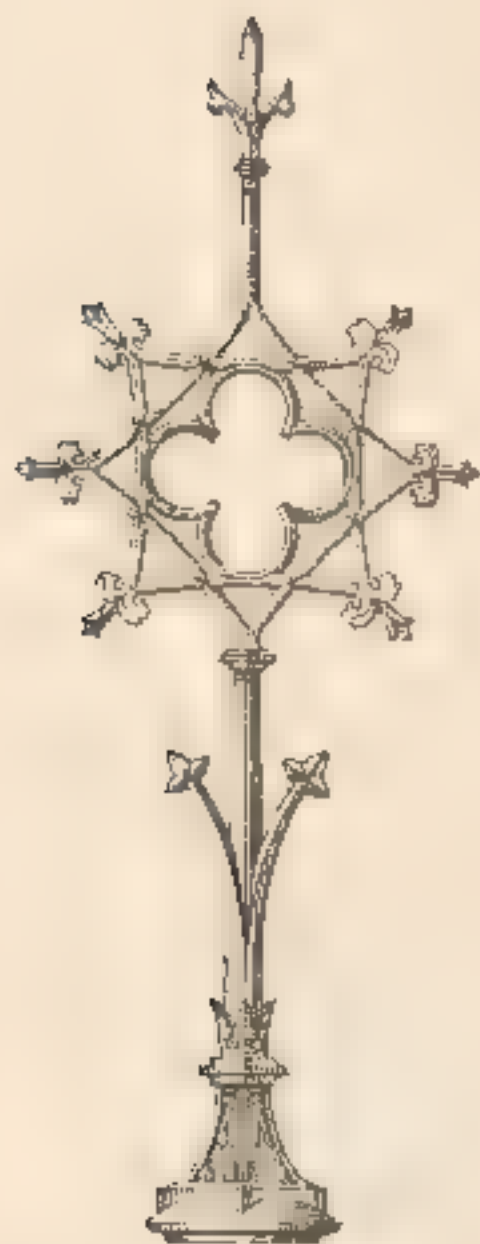
Nº



SCALE INCH = 1 FOOT

MACFARLANE'S TERMINALS &c

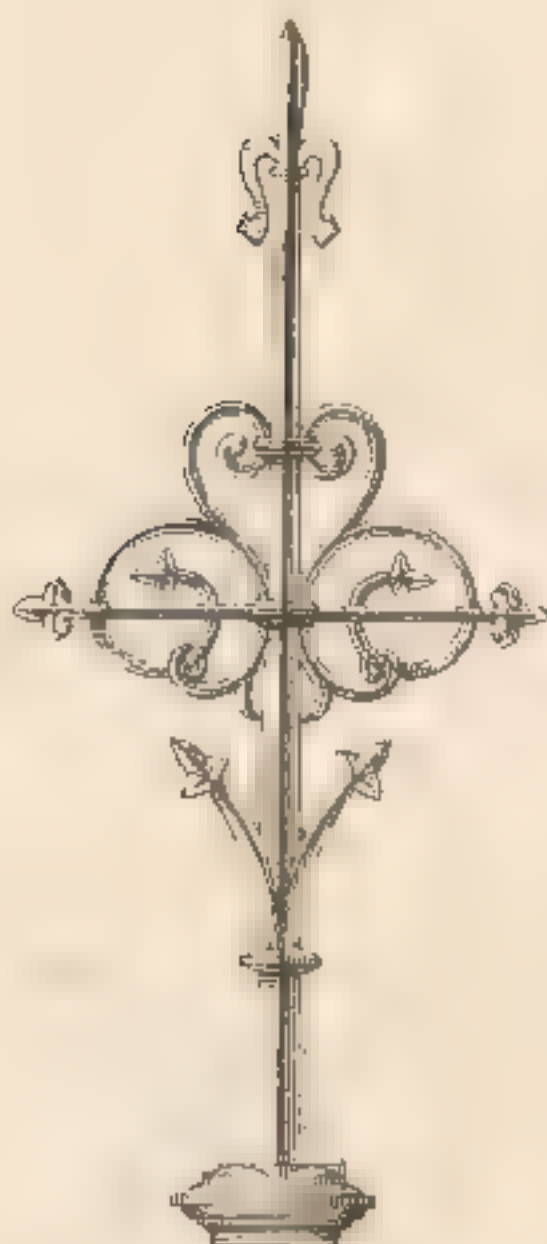
Nº 22



A

3 6

Nº 23



A

3 6

ARMS 2 AND 4 WAYS

Nº 24



A

3 6

Nº 29



A

3 6

Nº 25

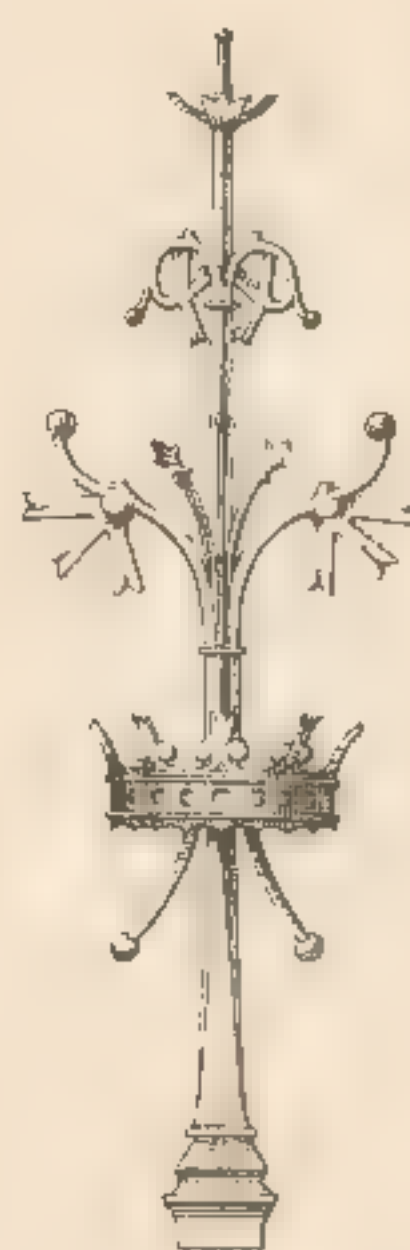


A

3 6

ARMS 2 AND 4 WAYS

Nº 31



A

3 6

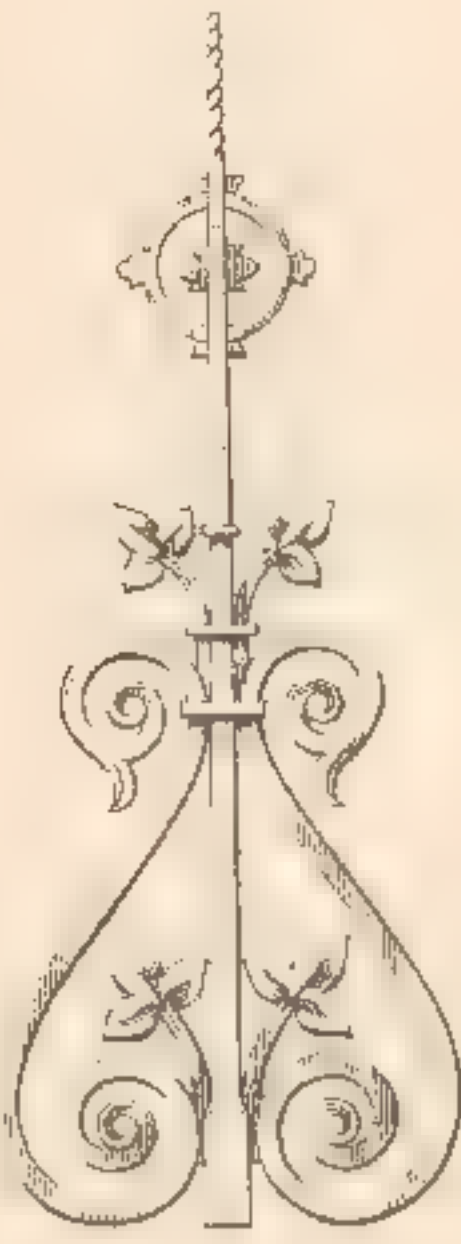
SCALE 1 INCH = 1 FOOT

MACFARLANE'S TERMINALS &c

Nº 52



Nº 138



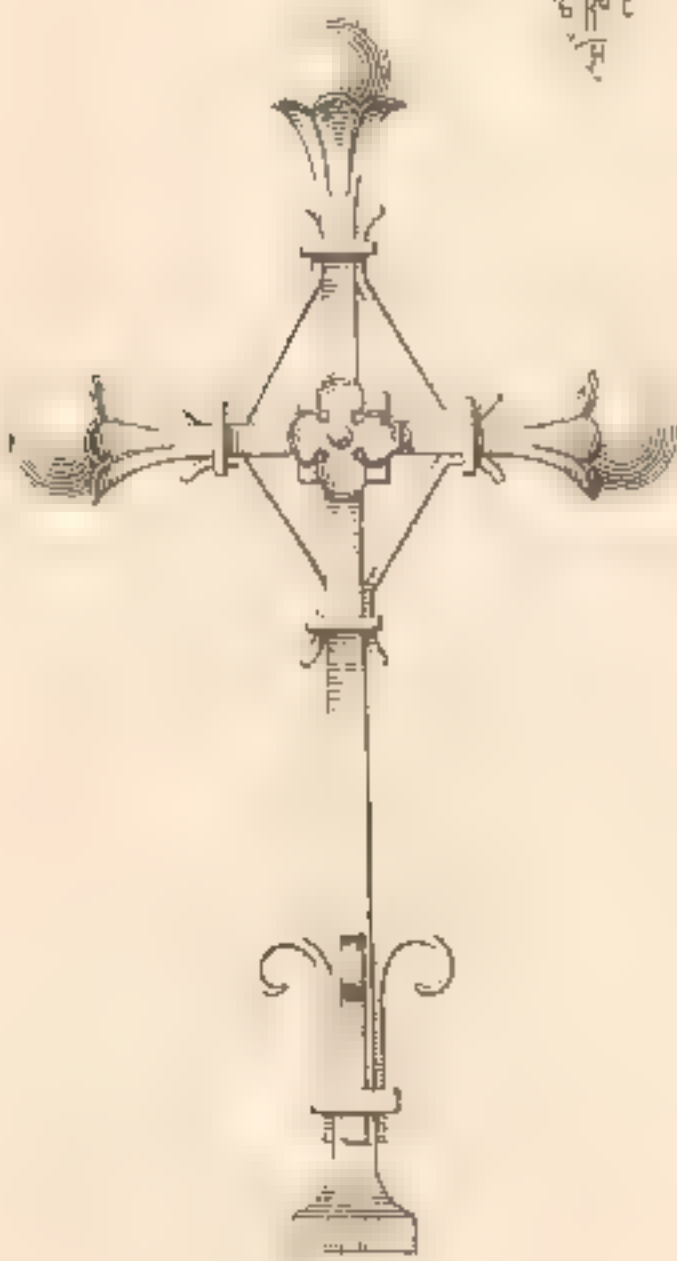
Nº 53



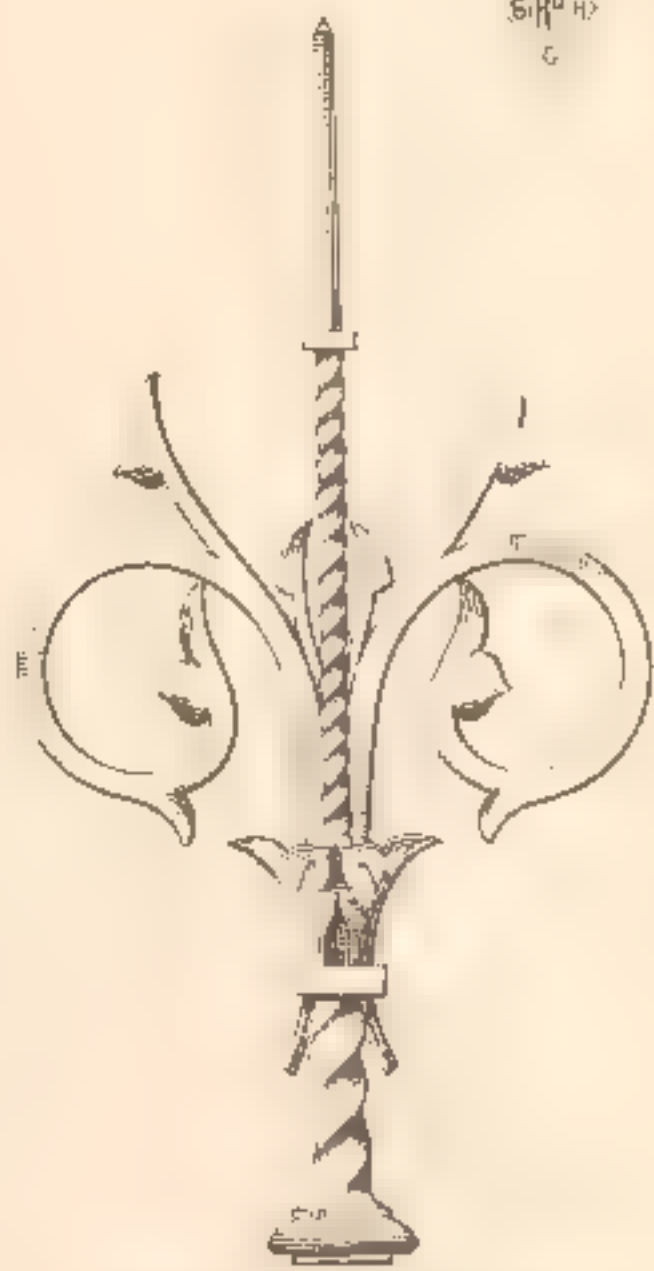
Nº 67



Nº 77



Nº 07



AFM, 2 406 - WA

SCALE 1 INCH = FOOT

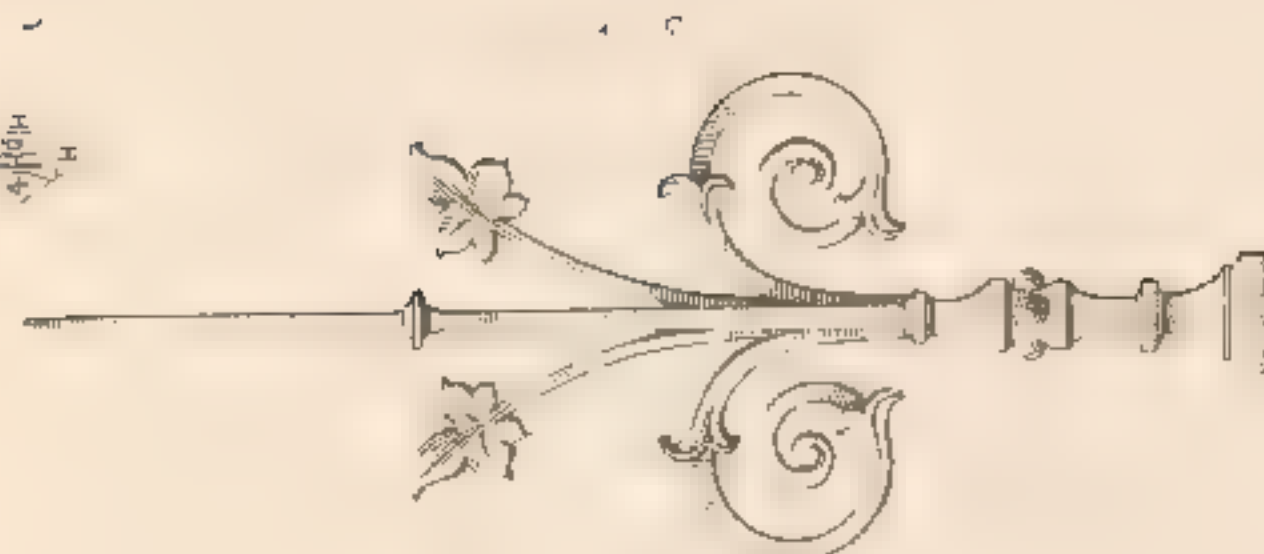
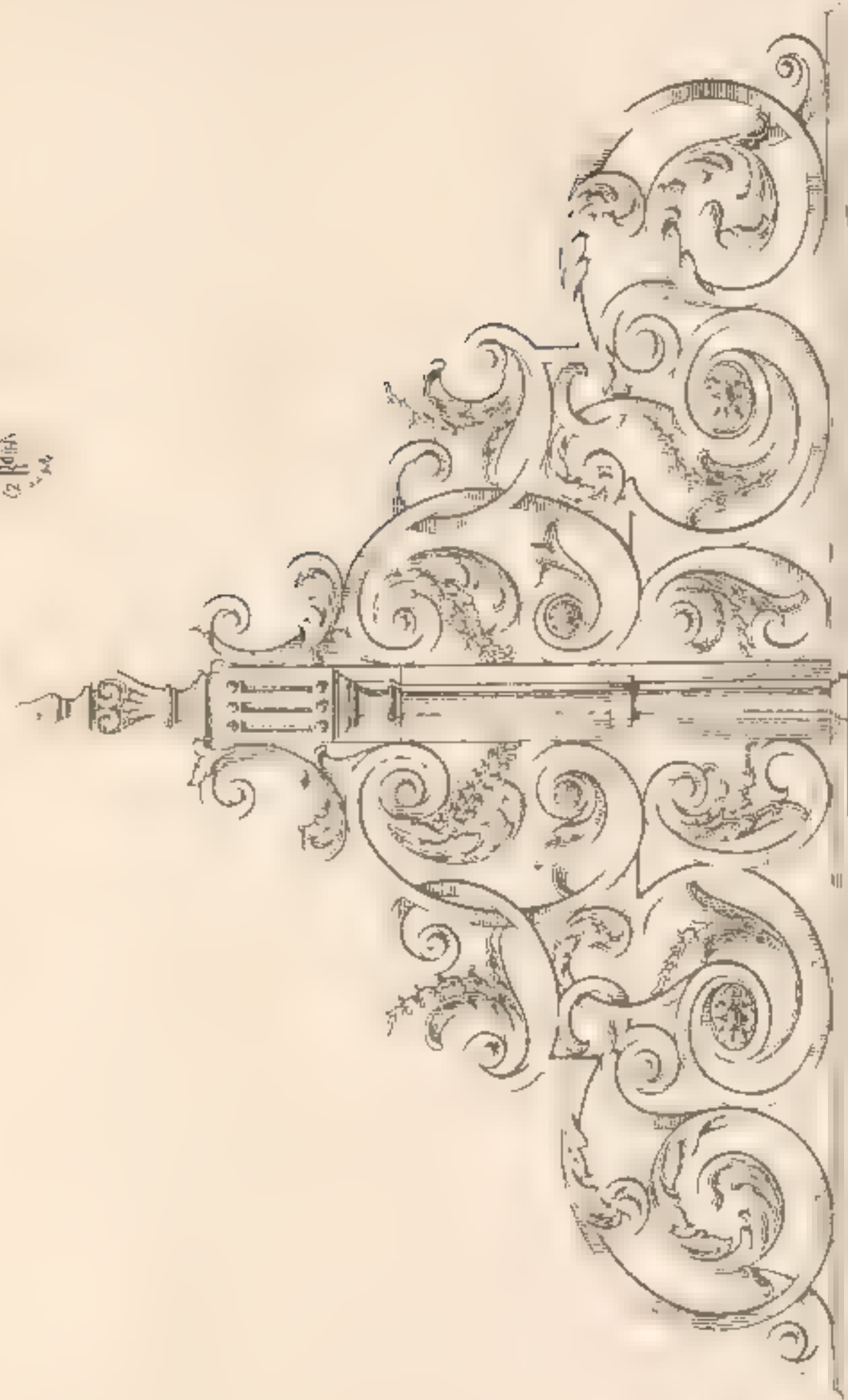
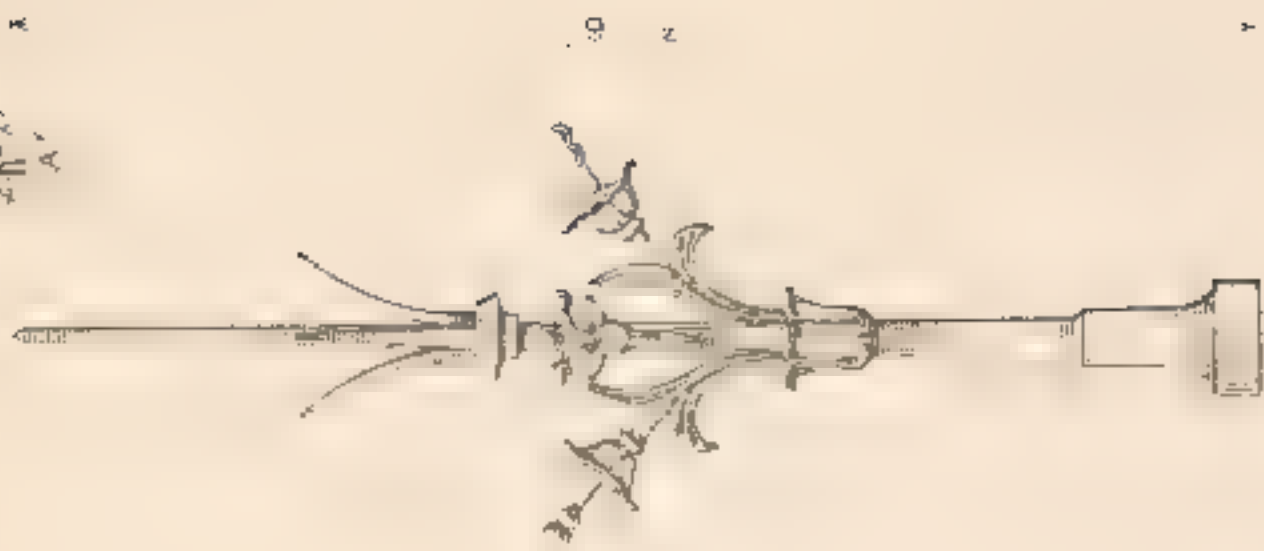
ORNAMENTAL TERMINALS &c

N 238

1
2 1/2 1/4

No 37

6
1 1/2 1/4

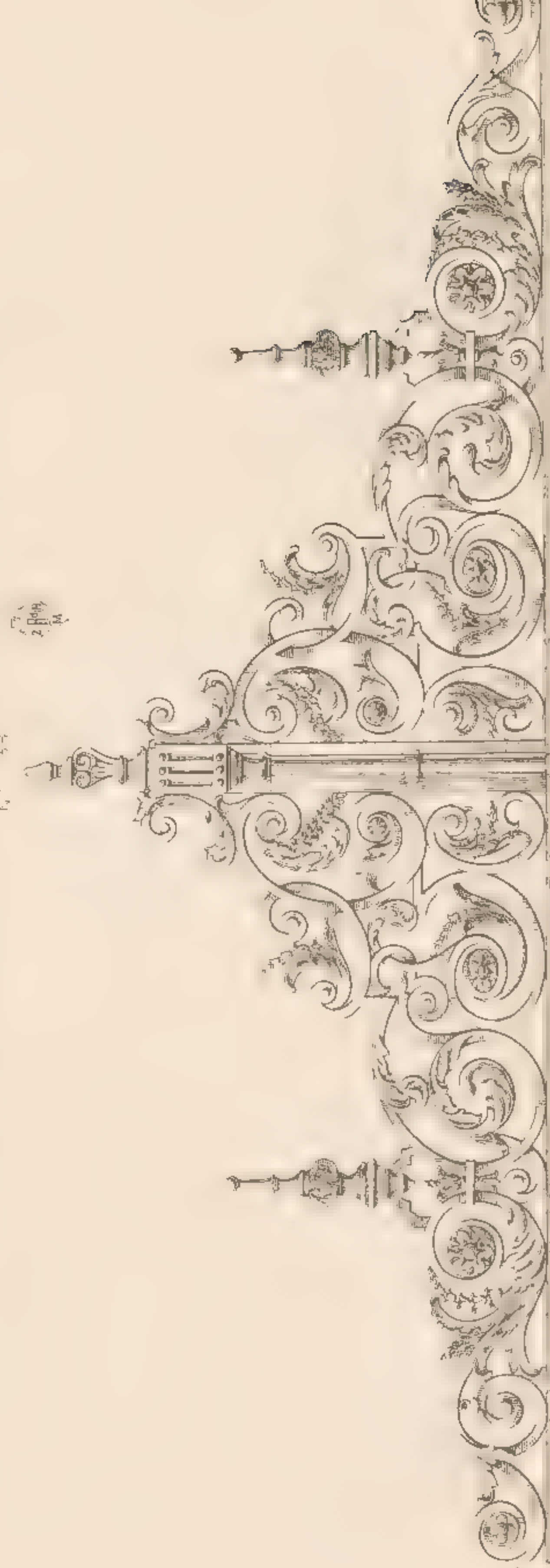


ARM 2 AN 4 A.A.S

1
2 1/2 1/4

N 238

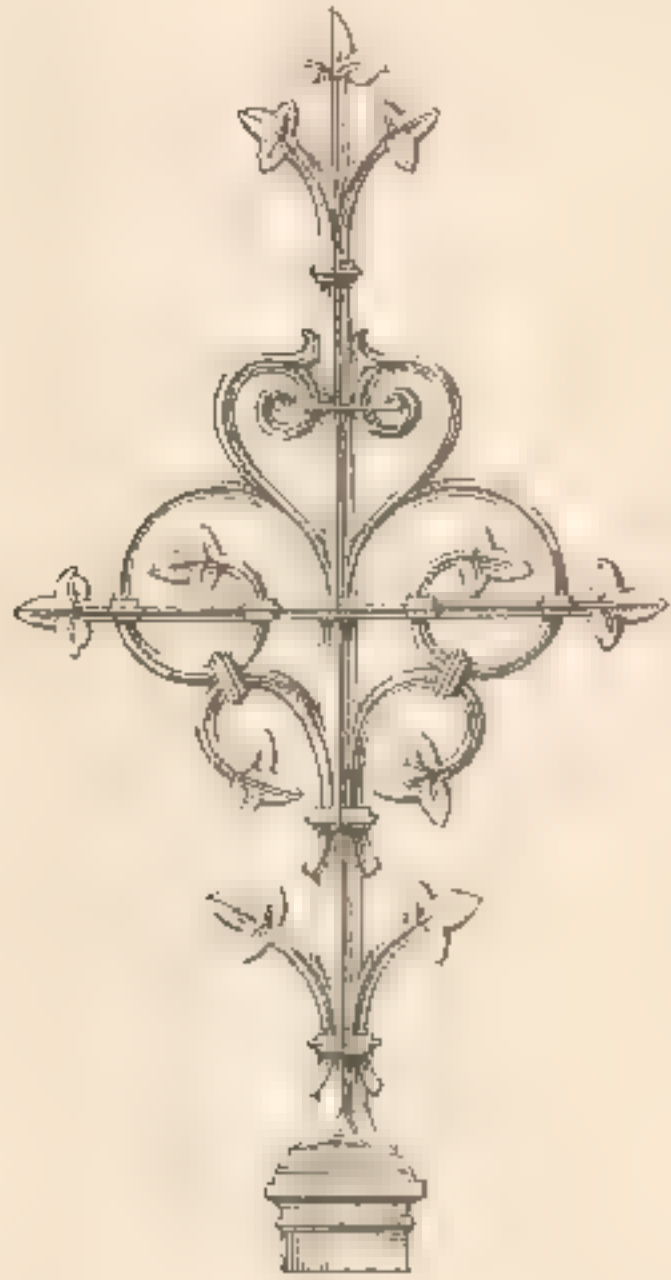
1



A E N H E O T

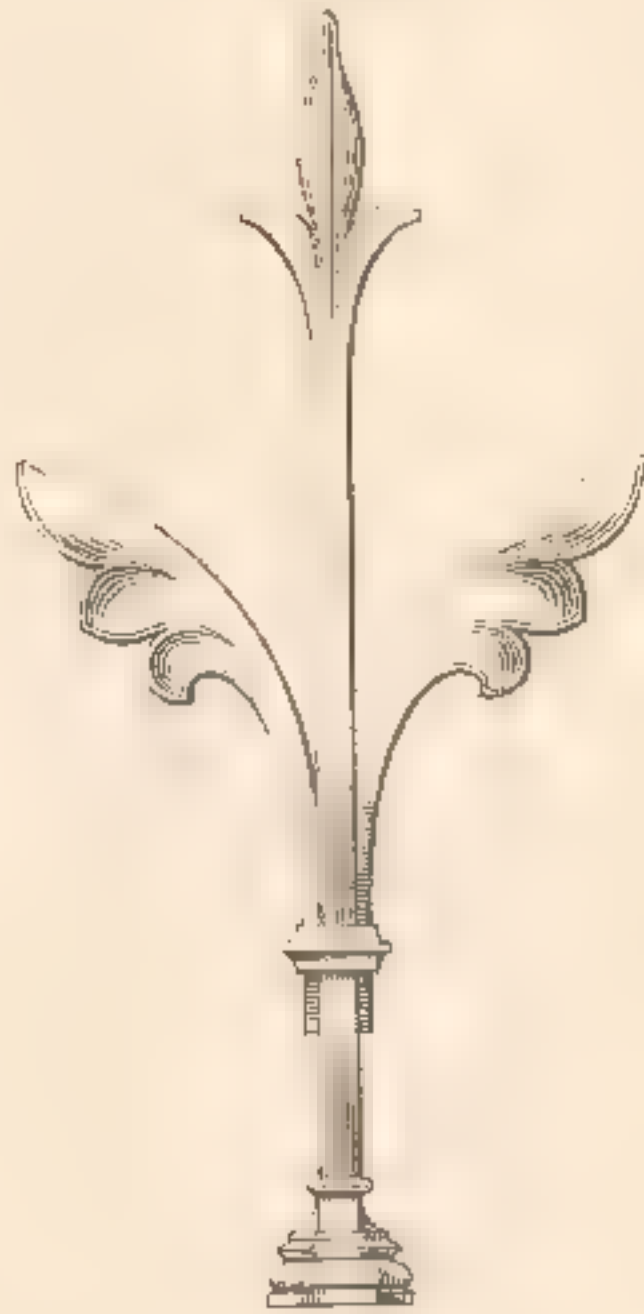
MACFARLANE'S TERMINALS &c

Nº 46



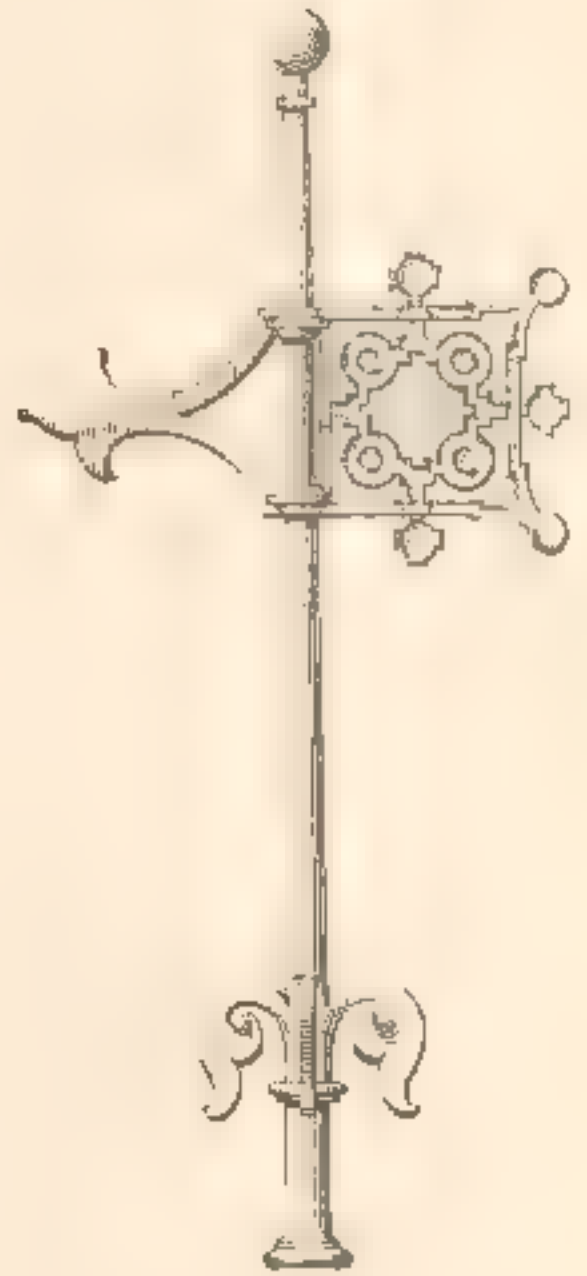
3 7

N 53



3 8

Nº 48



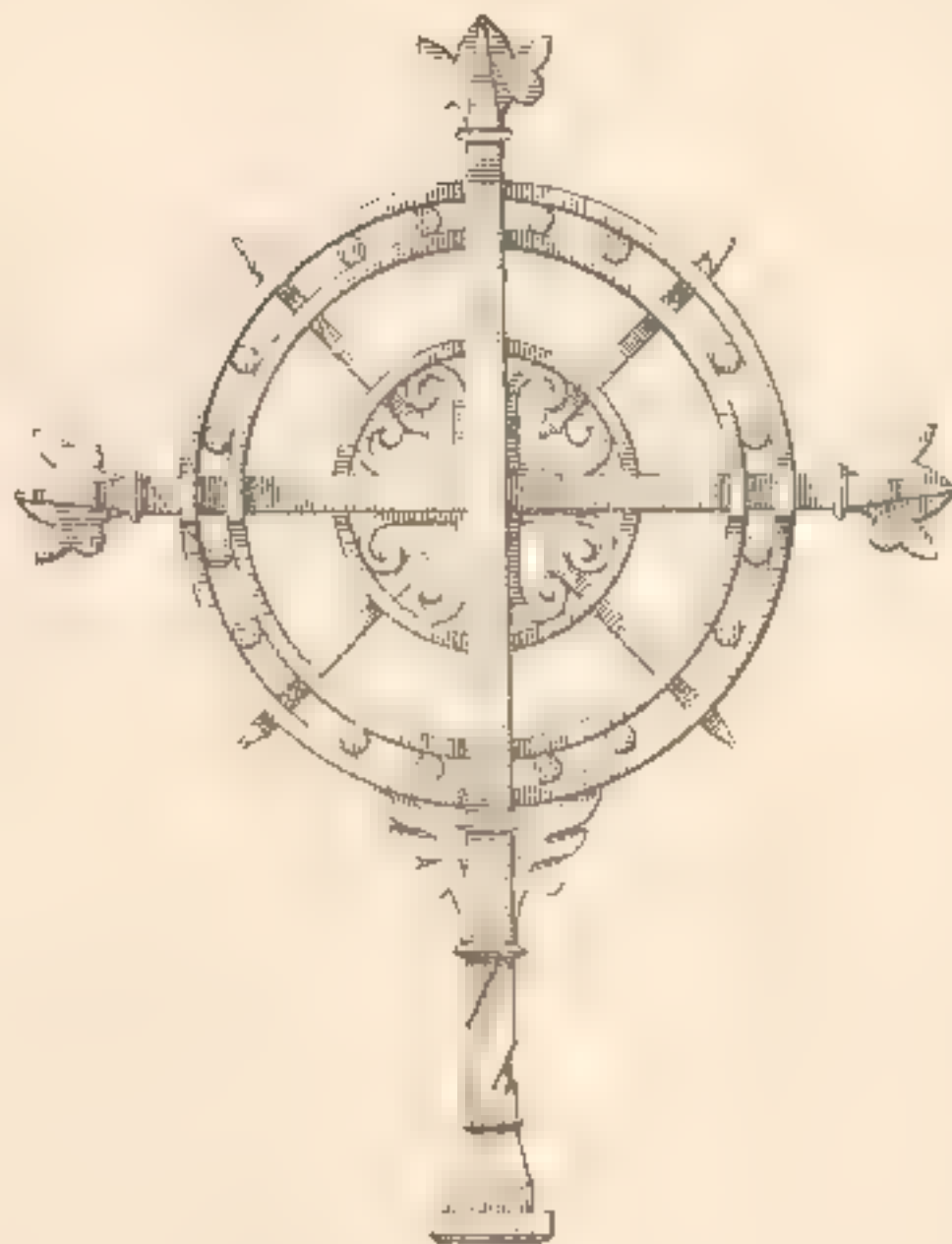
3 7

Nº 50



3 8

Nº 56



3 7

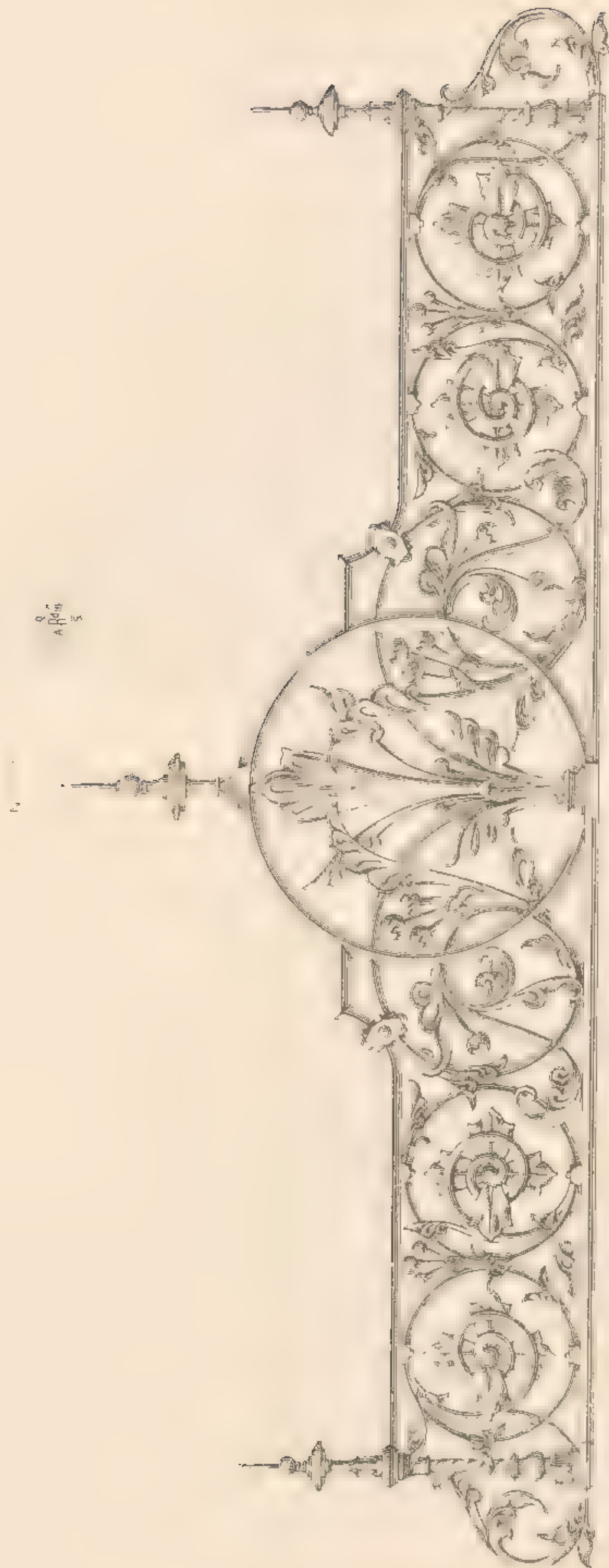
Nº 03



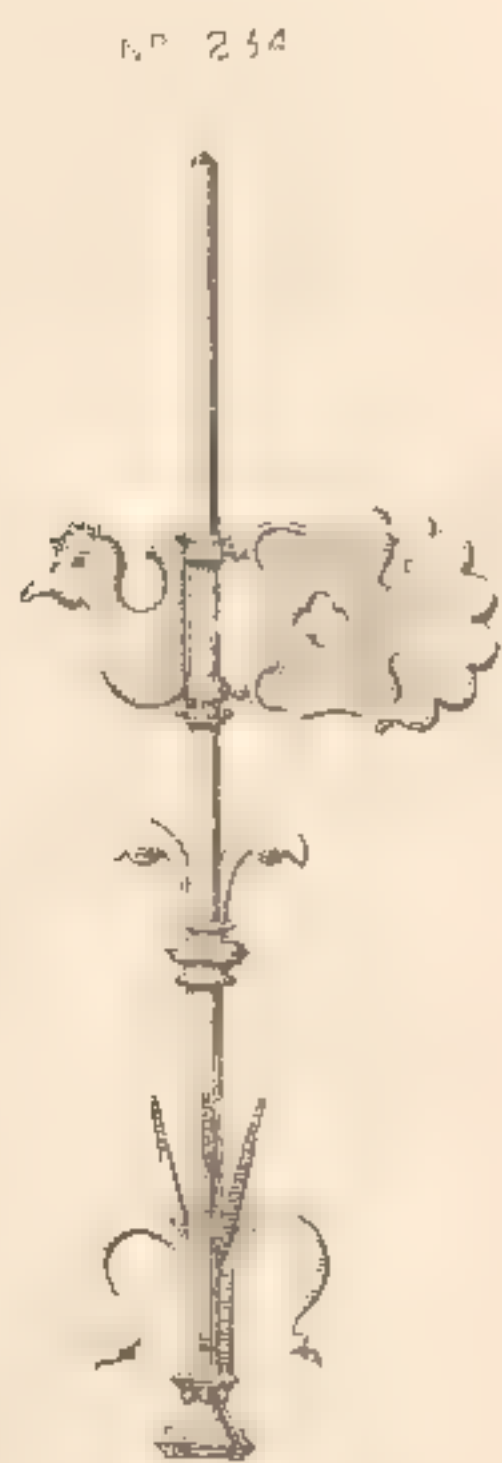
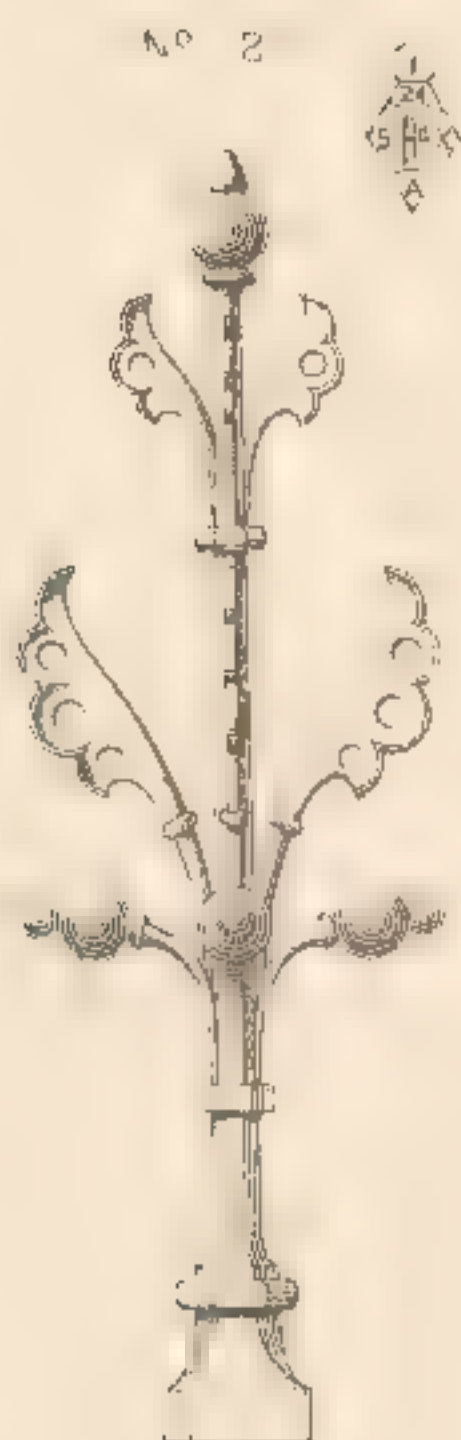
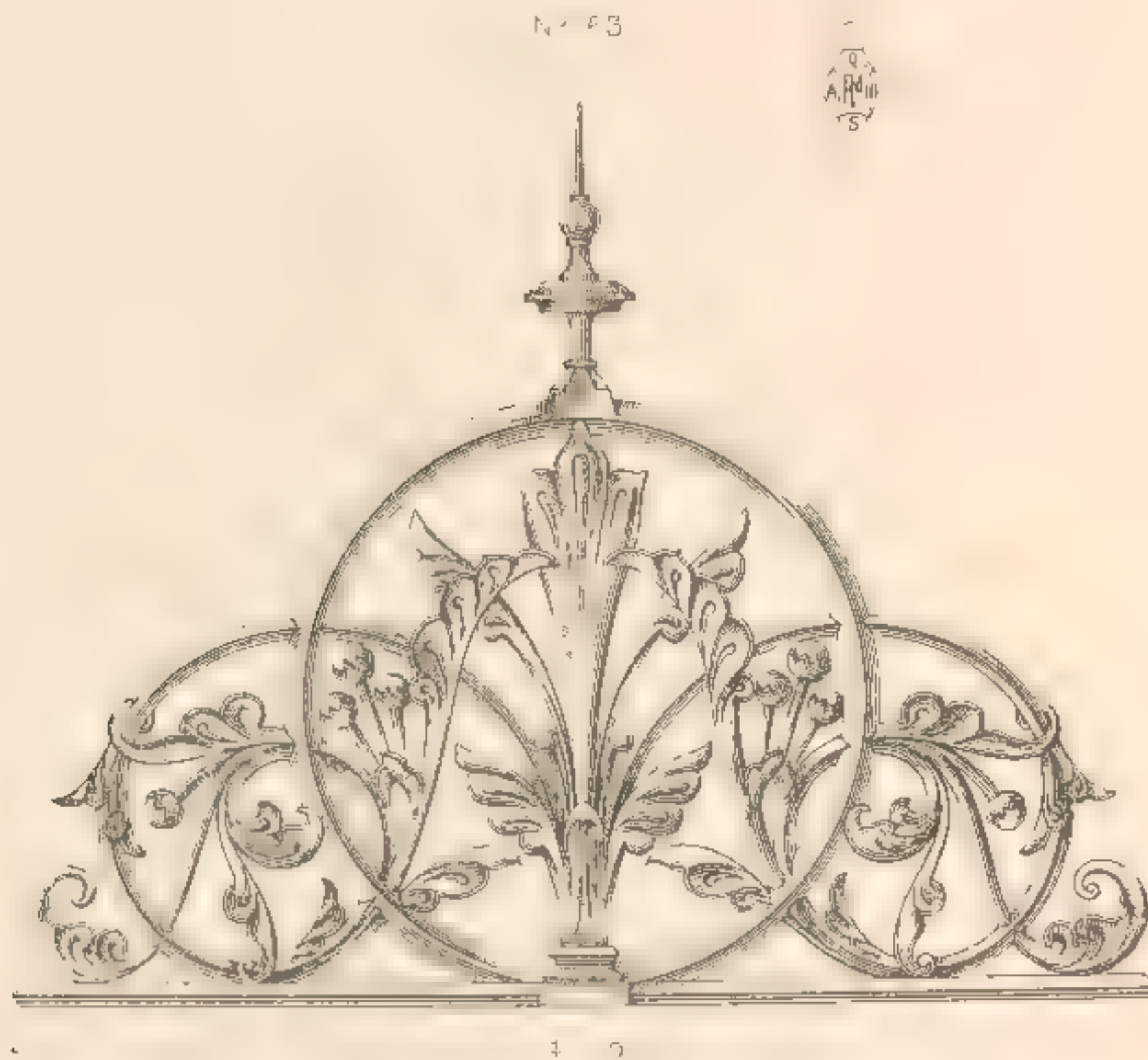
3 8

SCALE 1 INCH = FOOT

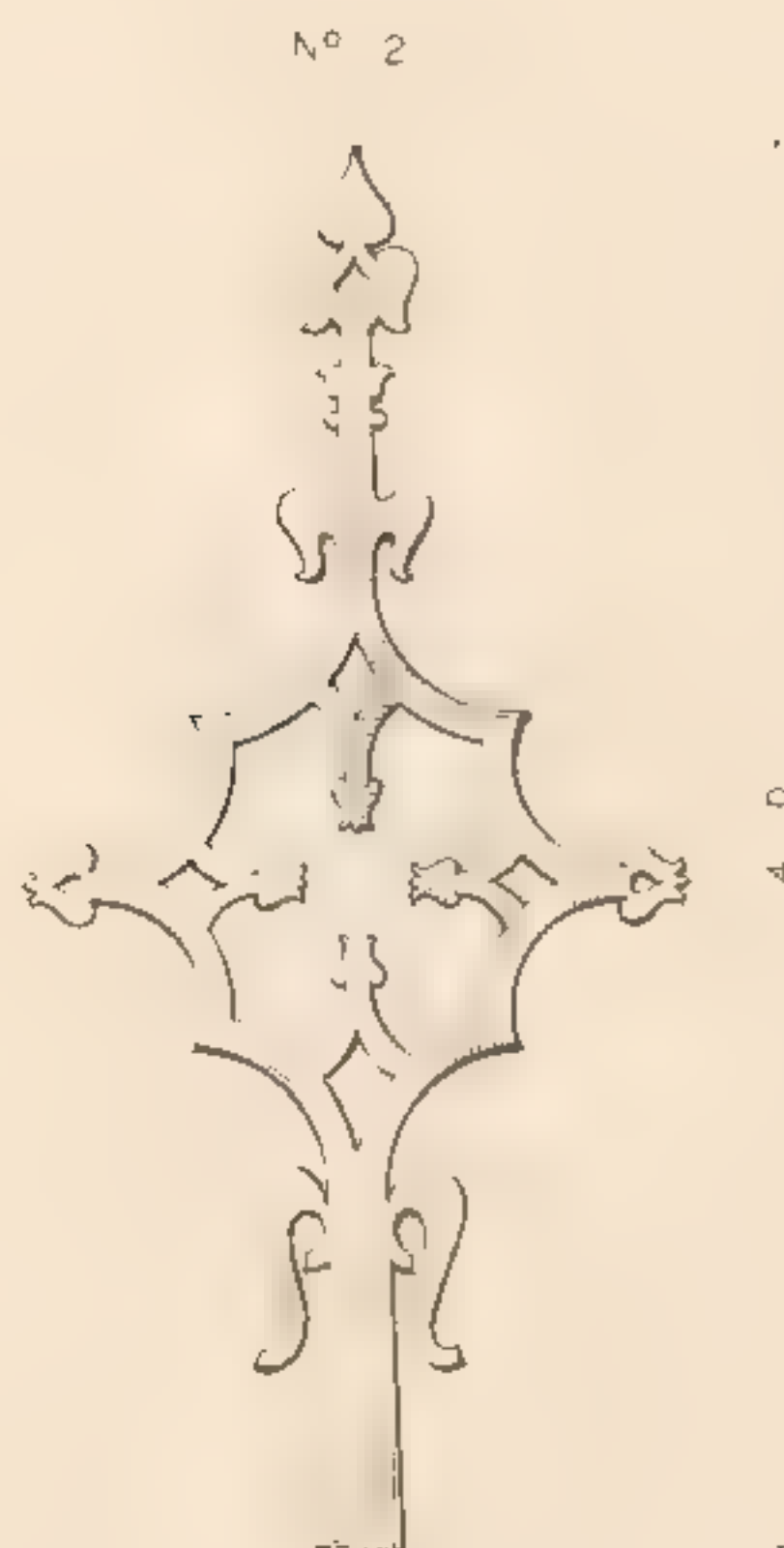
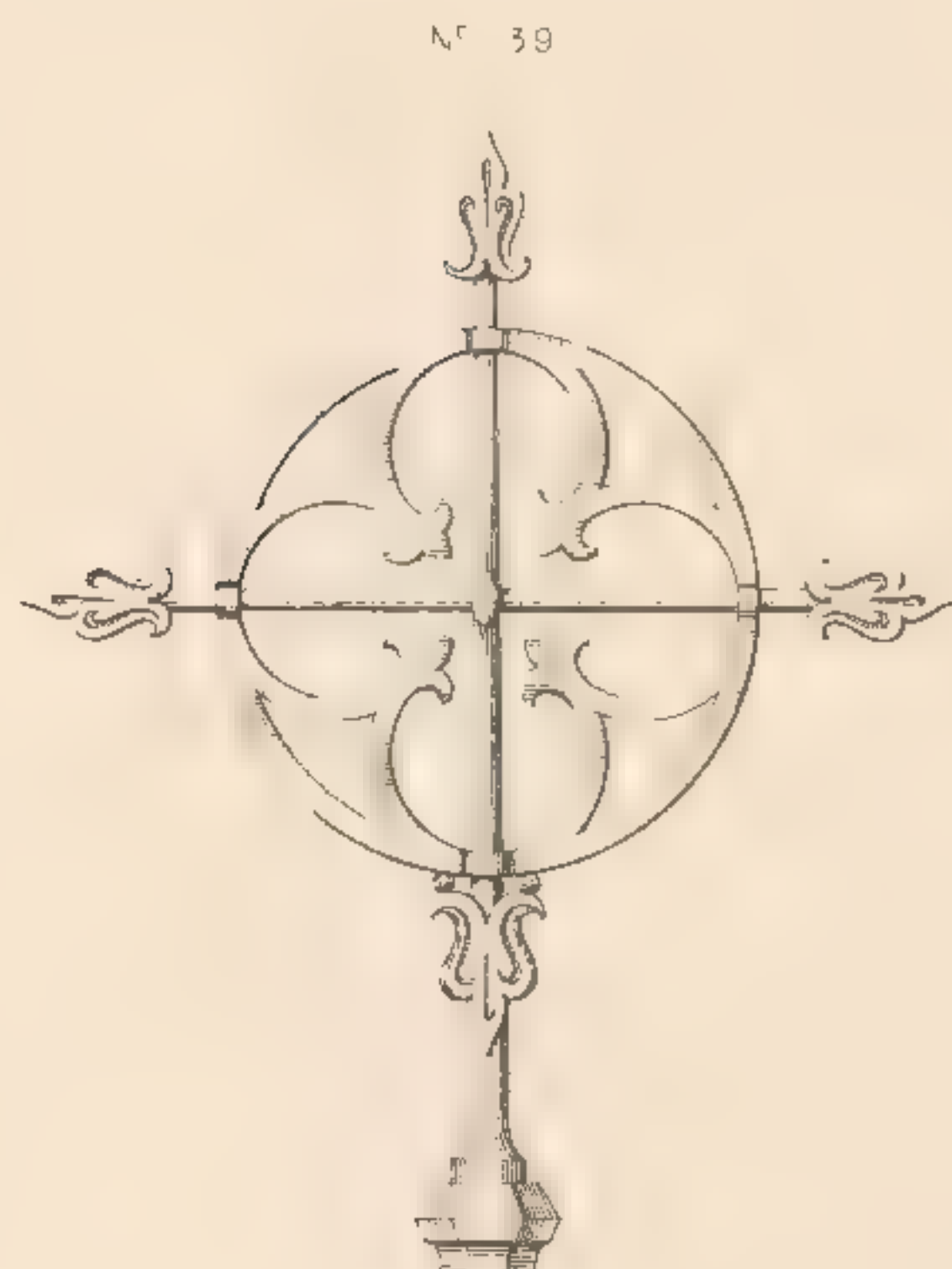
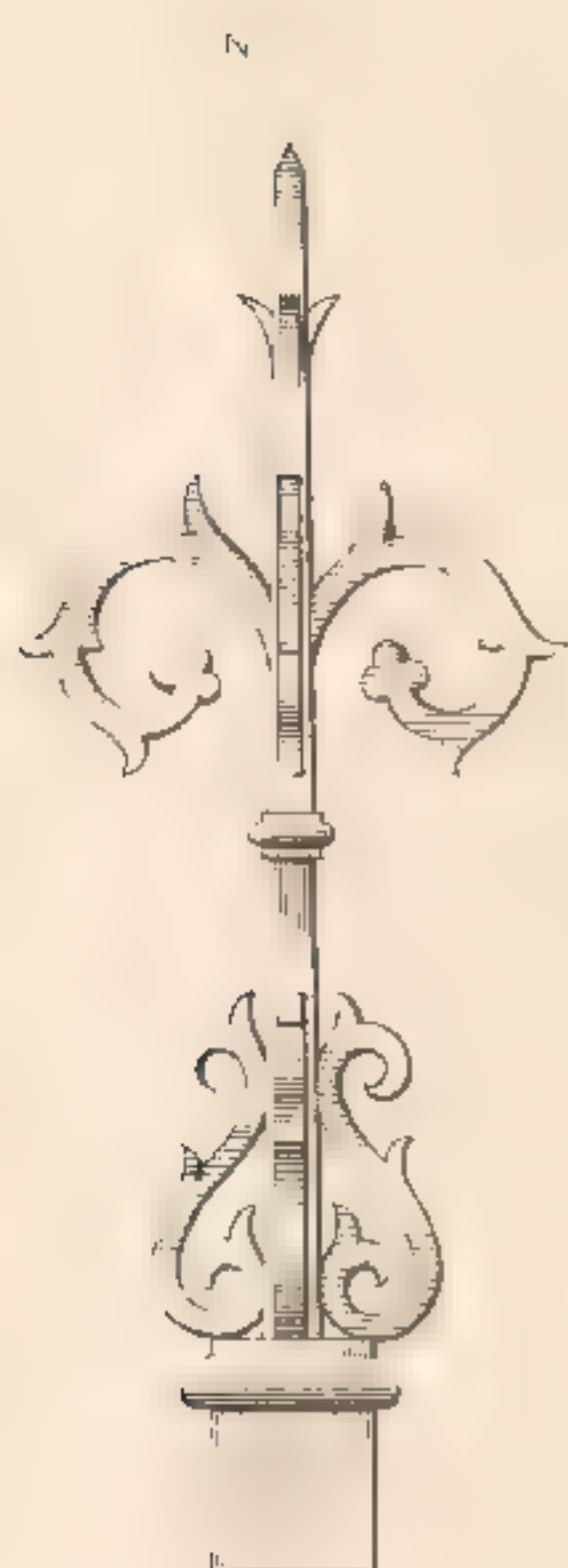
MACFARLANE'S TERMINALS &c



MACFARLANE'S TERMINALS &c



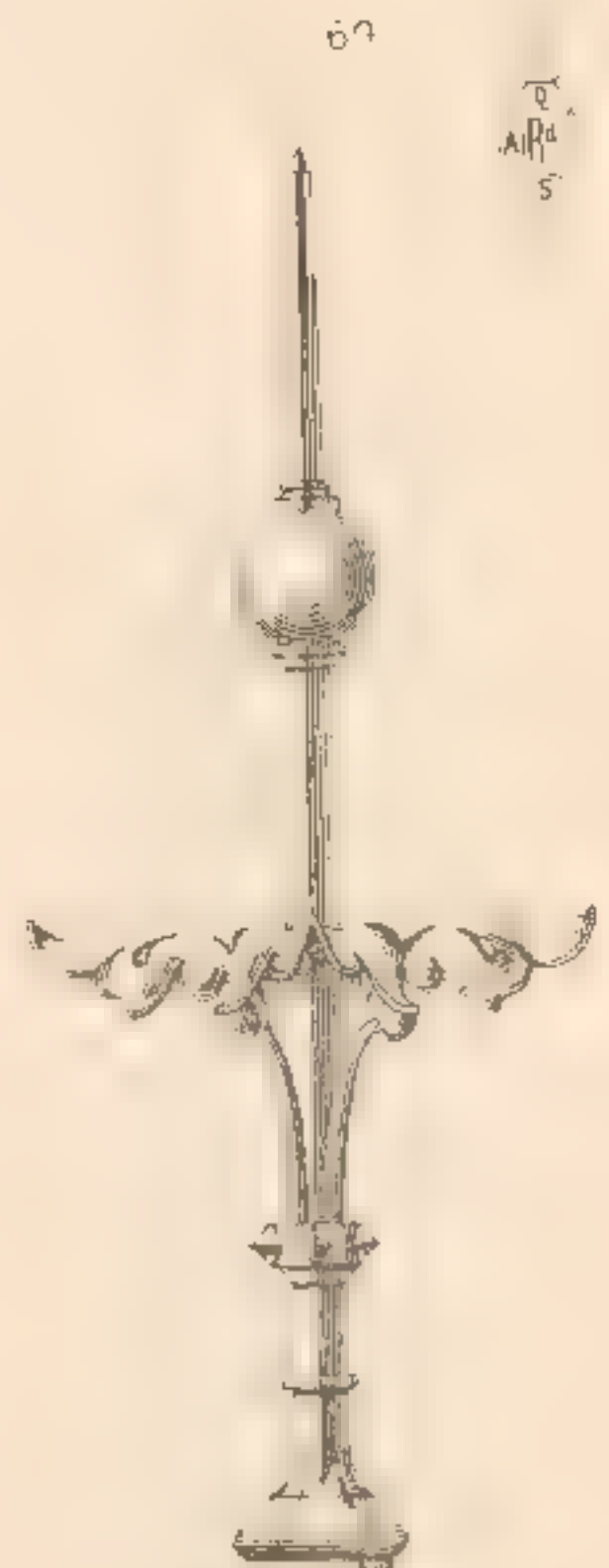
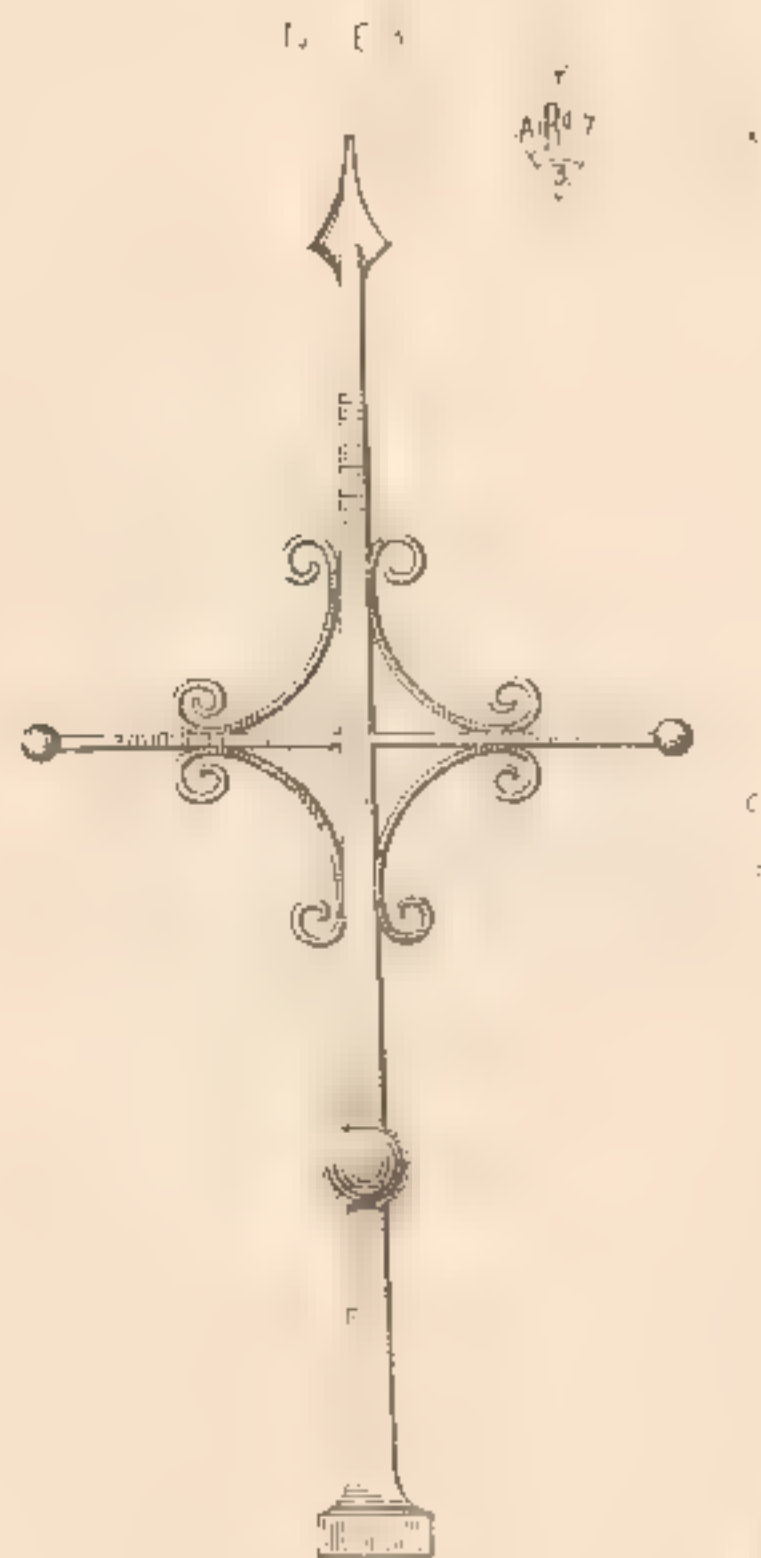
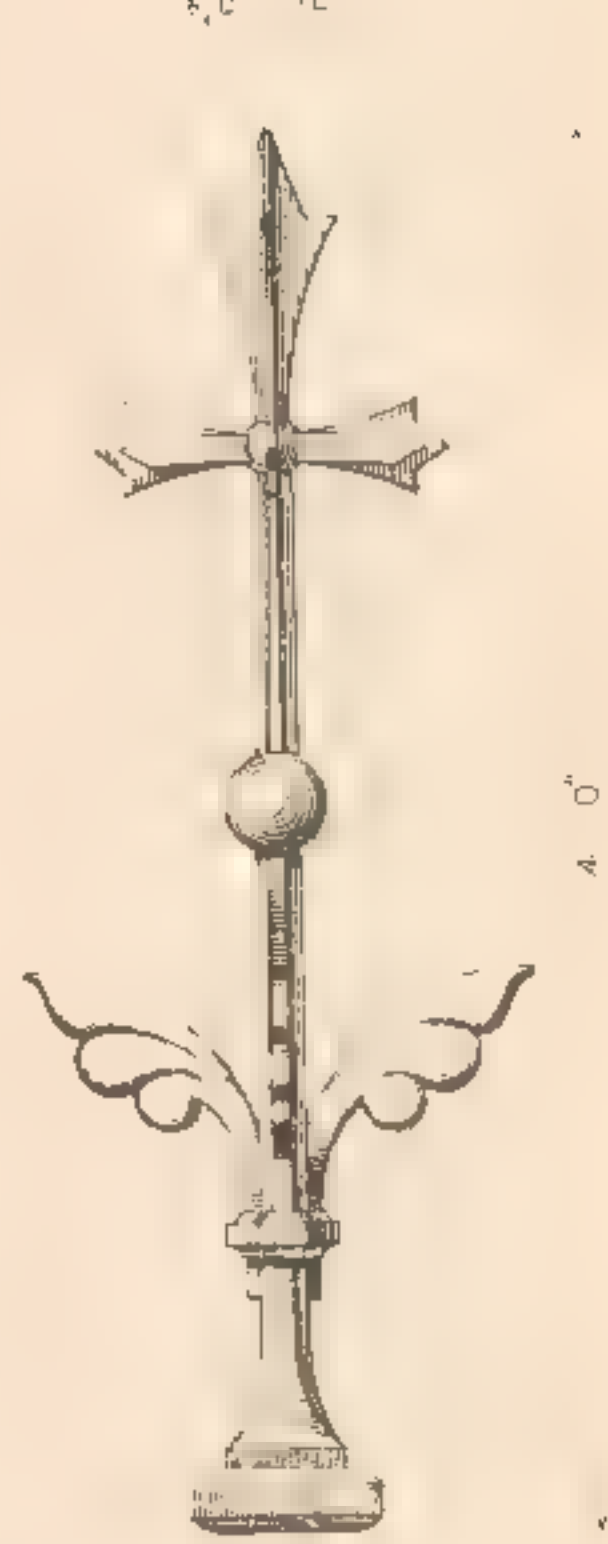
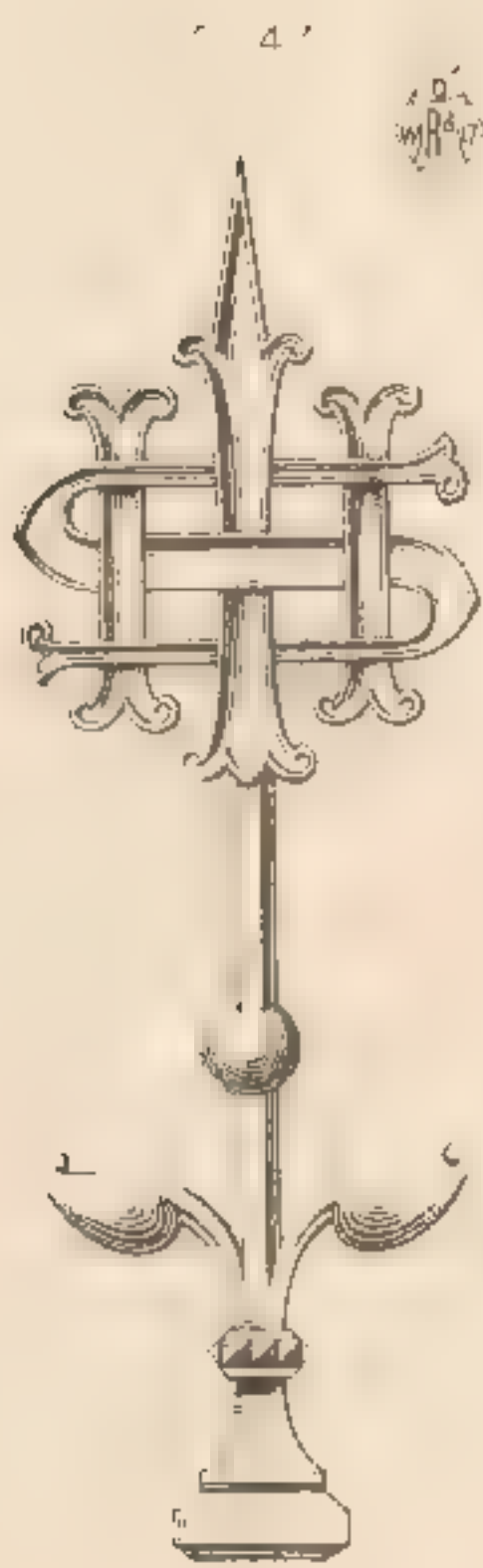
MACEAR AND TERMINALS &c



ARMS 2 AND 4 WAYS

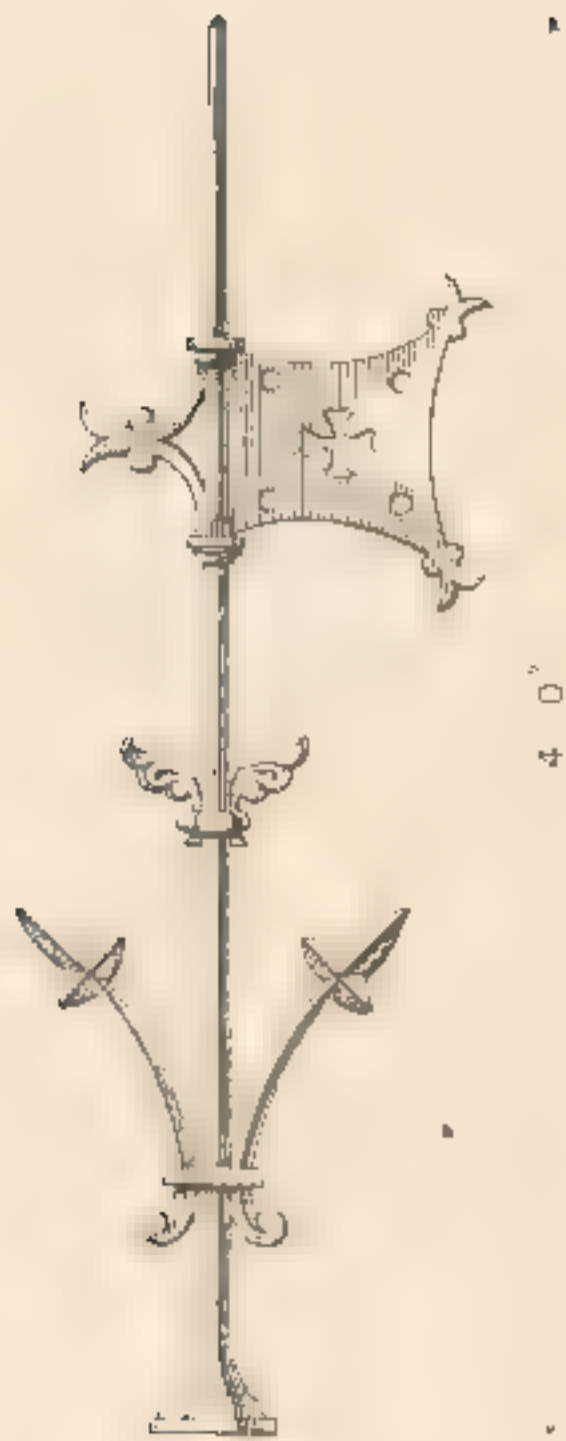
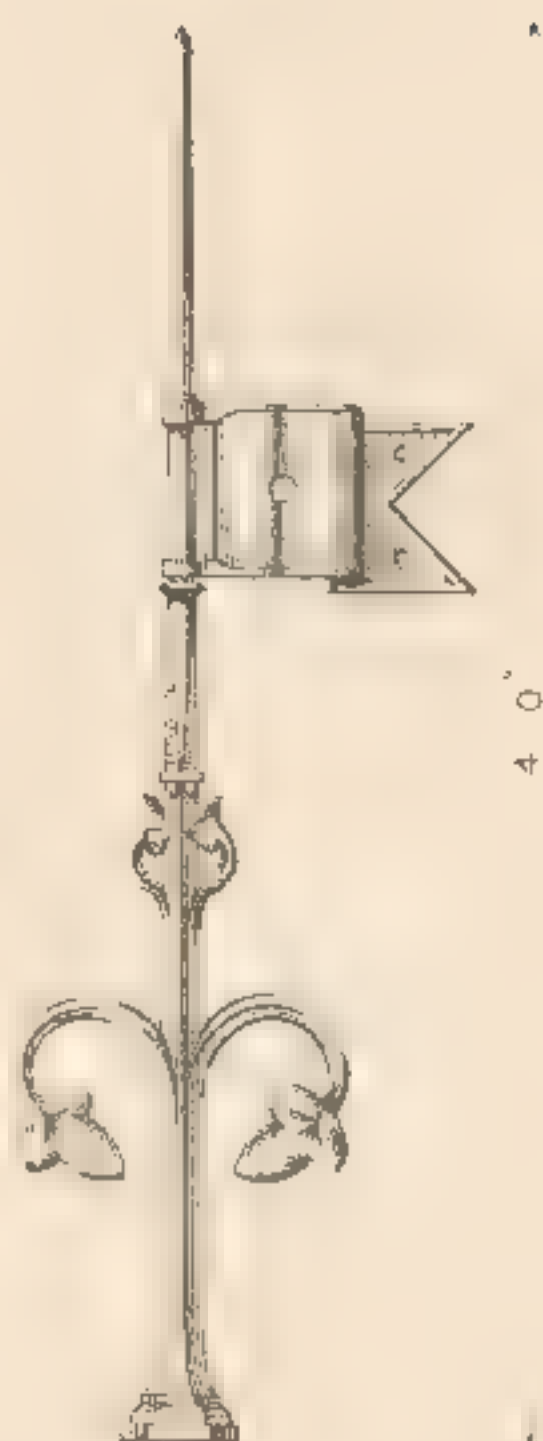
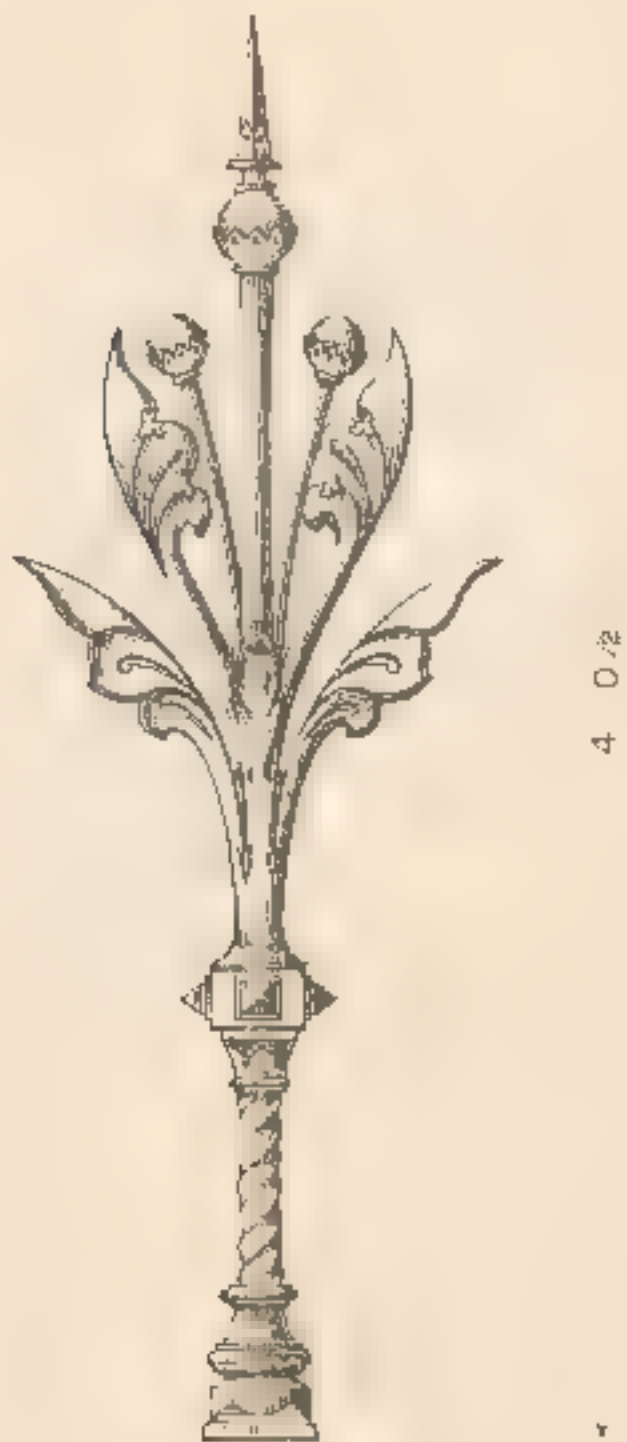
C A F 1/4 IN F 10 T

MACFARLANE'S TERMINALS &c



SCALE 1 INCH = 1 FOOT

MACFARLANE'S TERMINALS &c

N^o 232N^o 113N^o 233N^o 98N^o 236N^o 7

SCALE 1 INCH = 1 FOOT

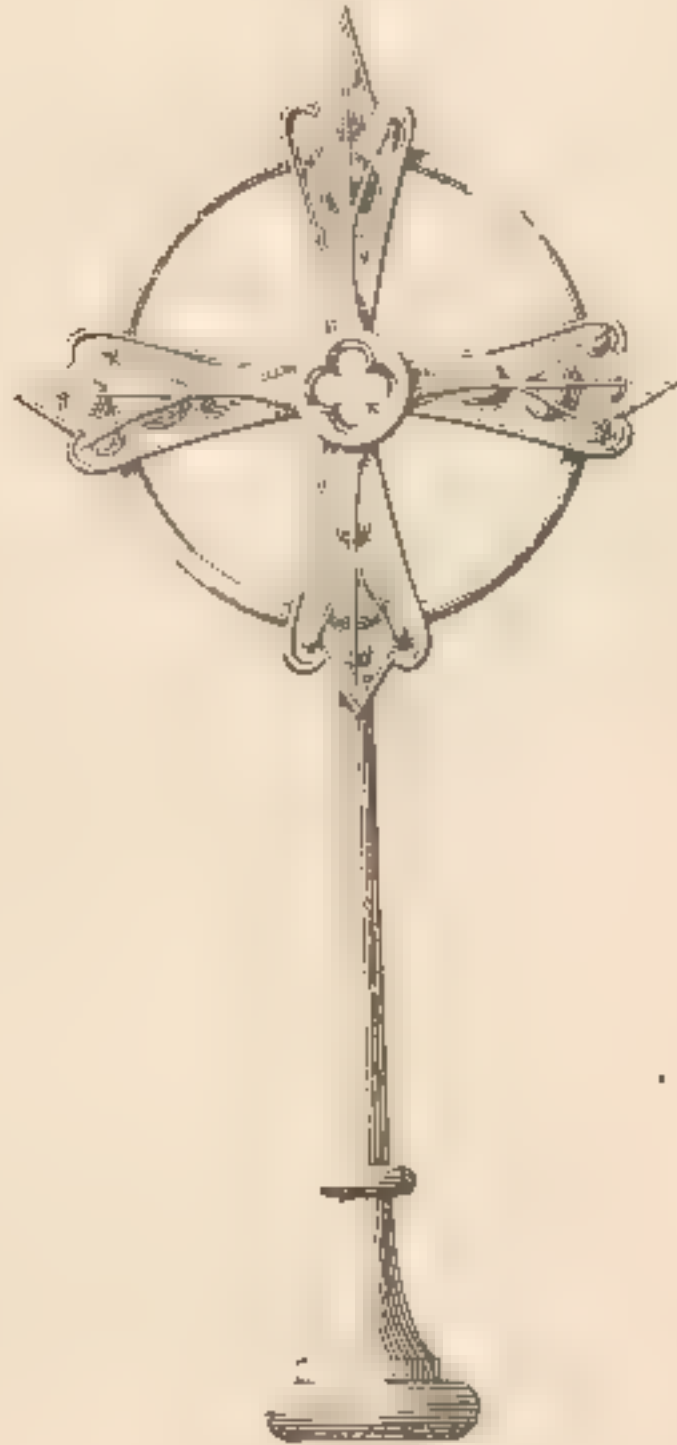
MACFARLANE'S TERMINALS &c

N 69



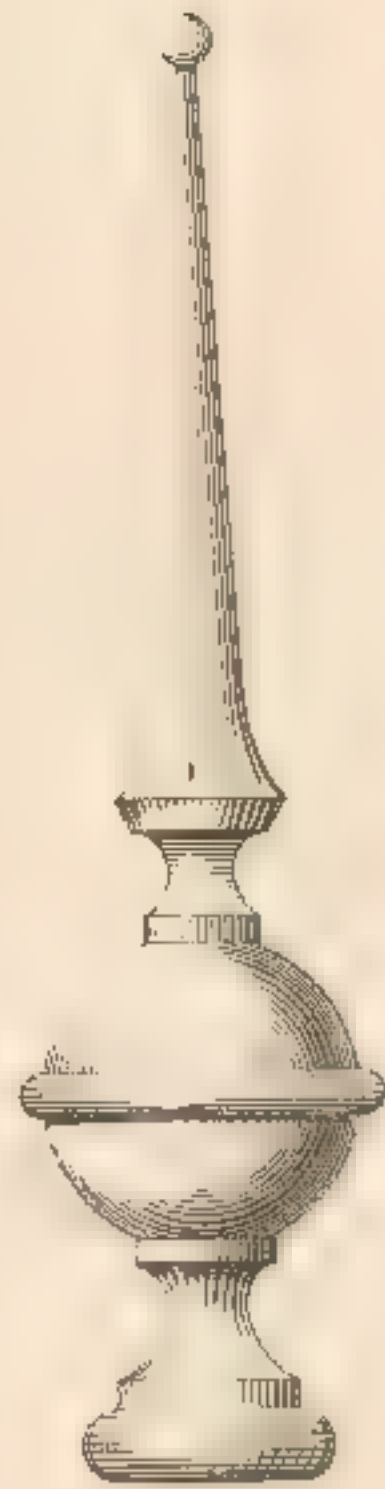
4

N 43



4

N 37

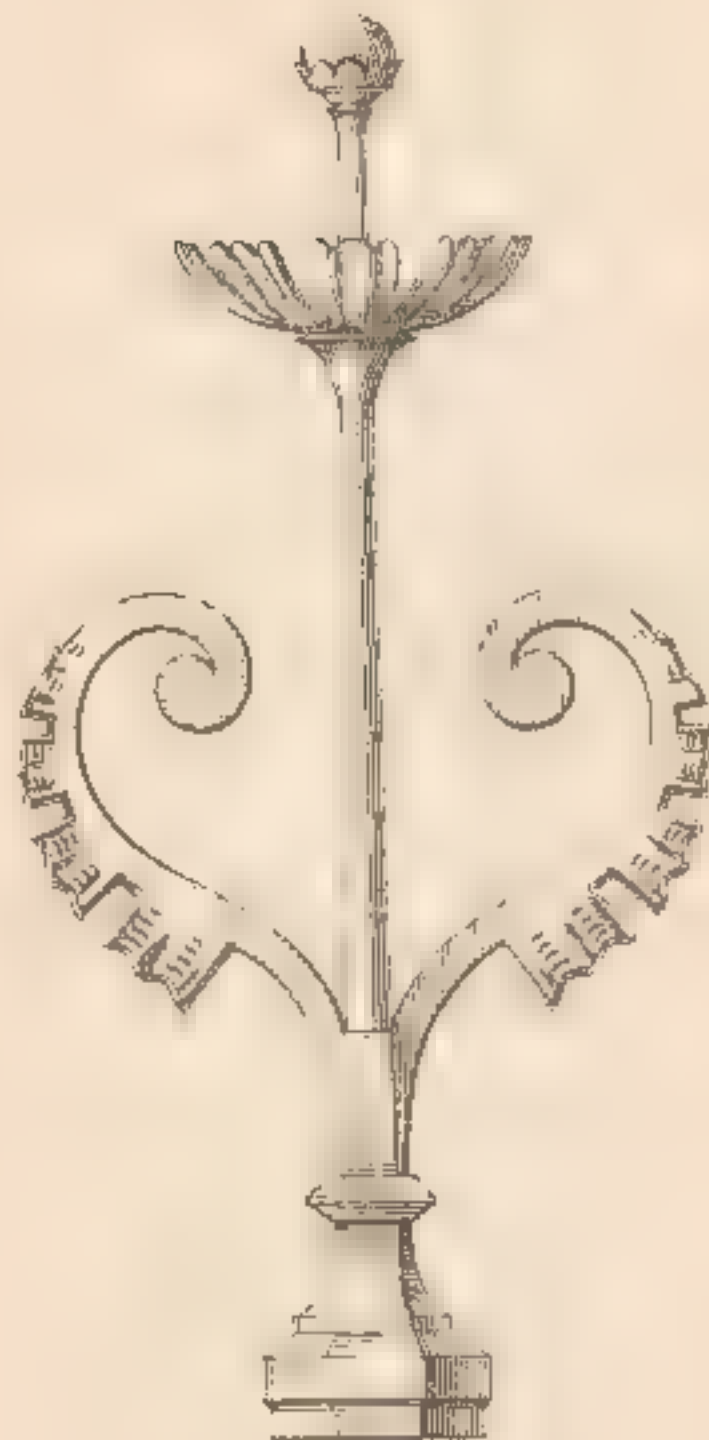


2

N 52

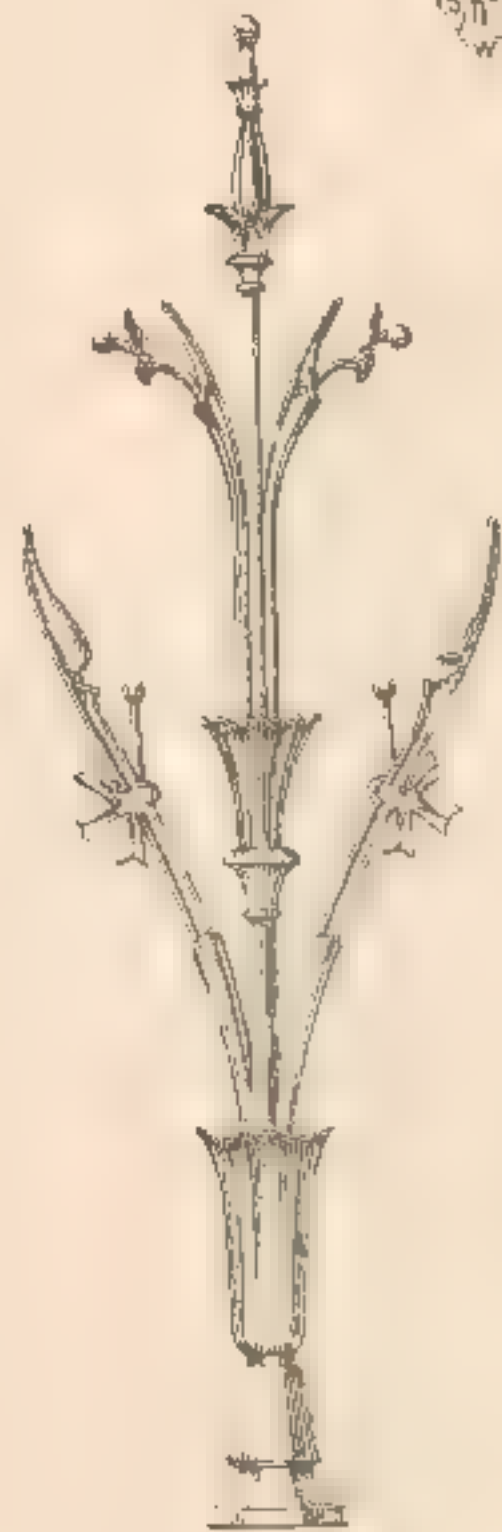


N 28



ARM AND 4 WAYS

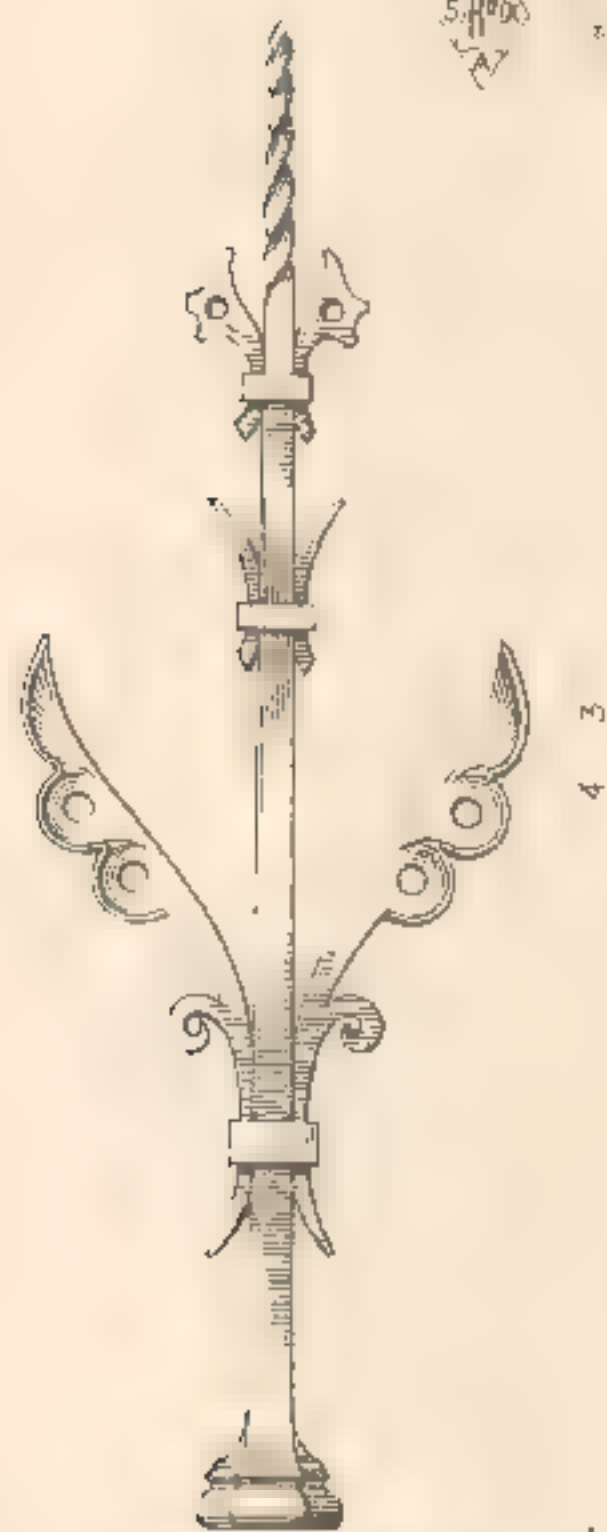
N 88



1 1/2
5 1/2
4 1/2

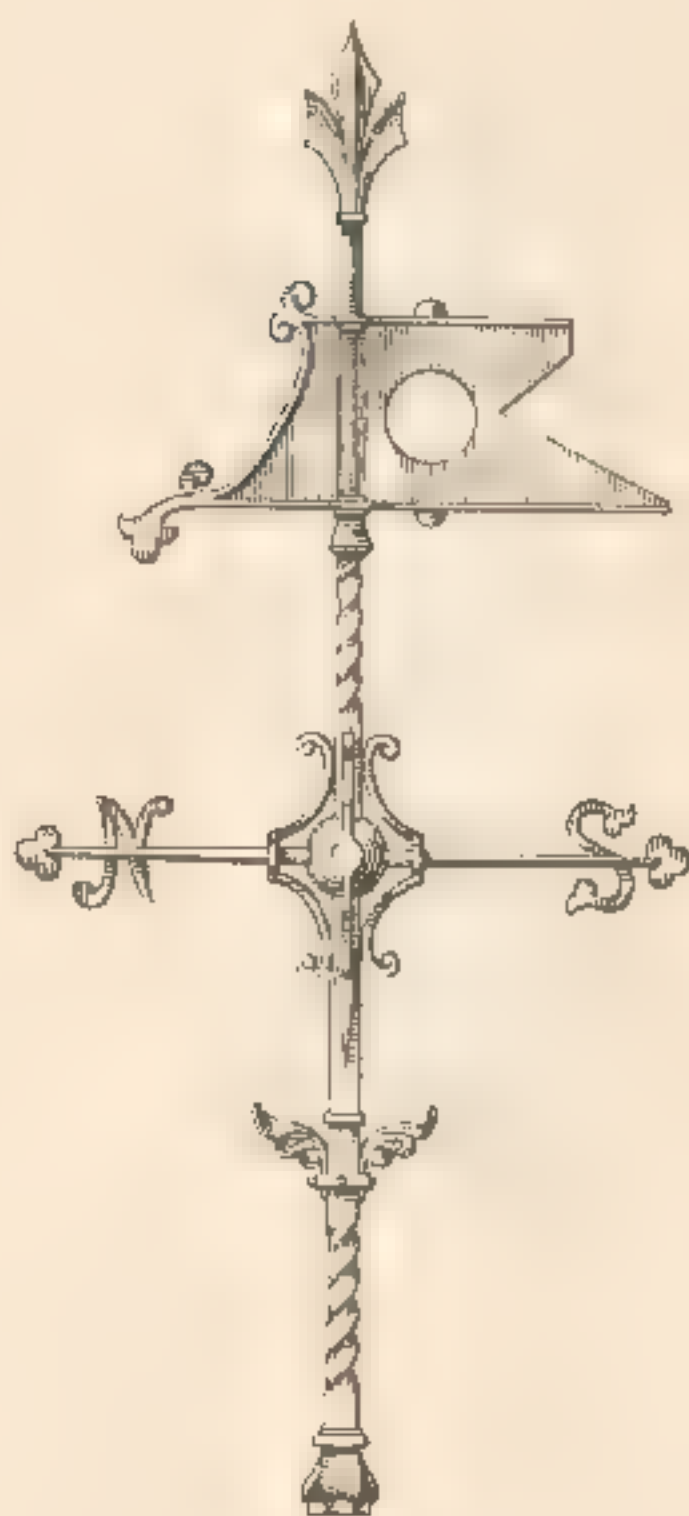
MACFARLANE'S TERMINALS &c

No 65

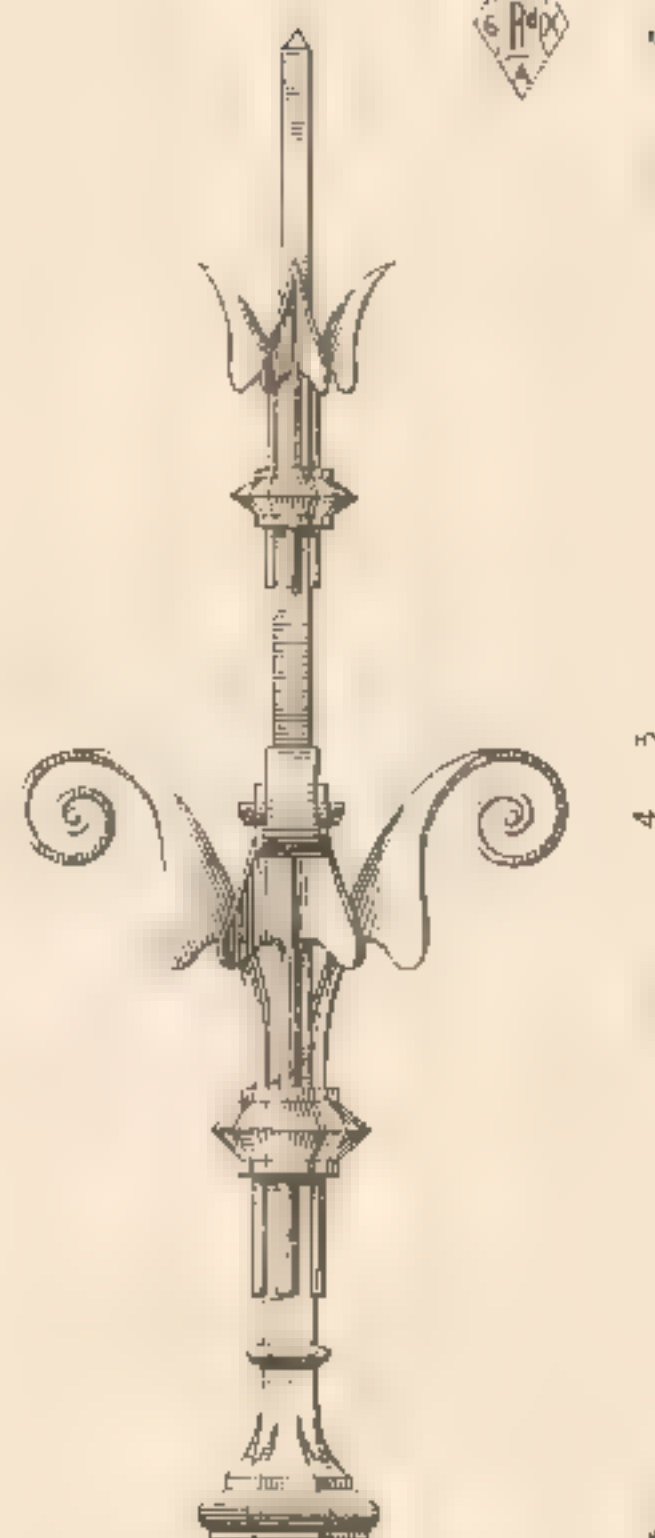


ARMS 2 AND 4 WAY

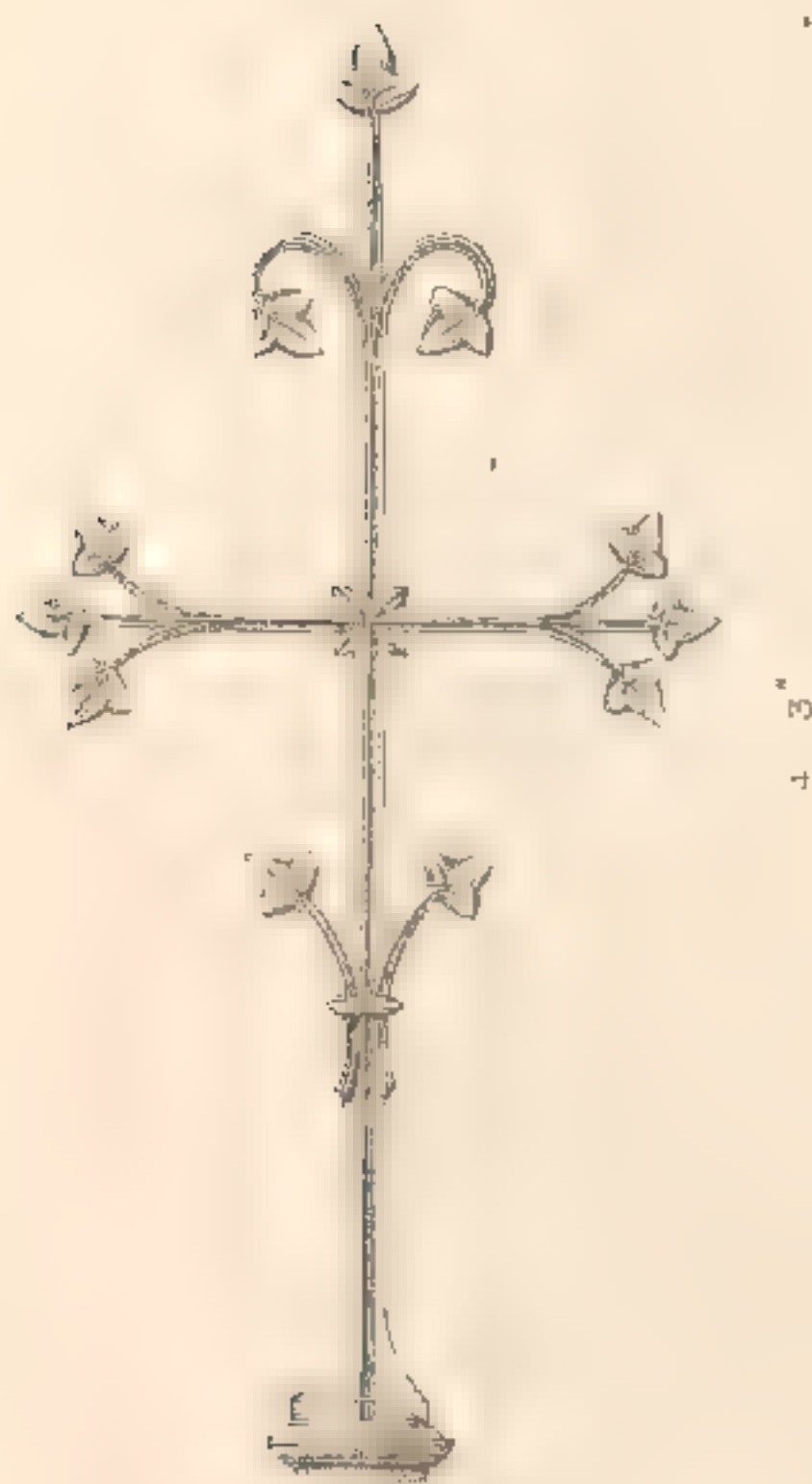
No 245



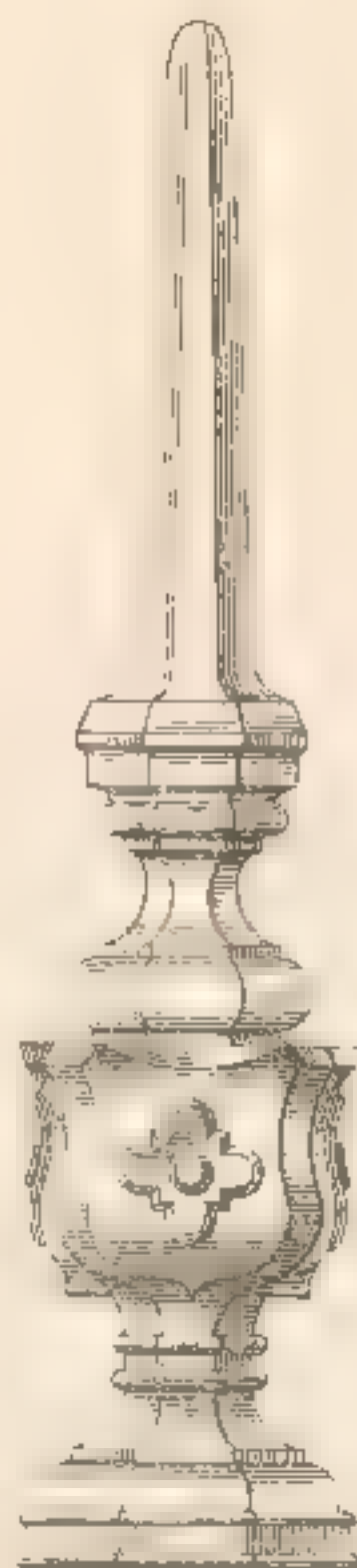
No 53



No 250



No 5



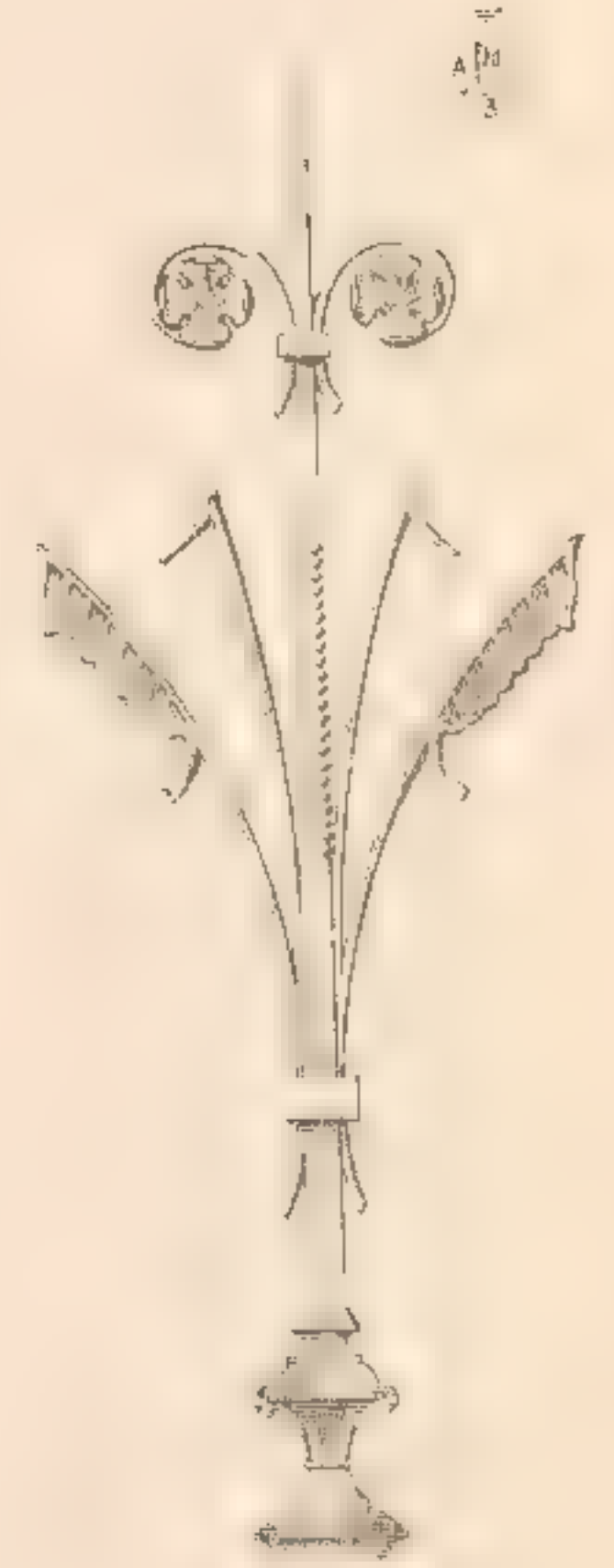
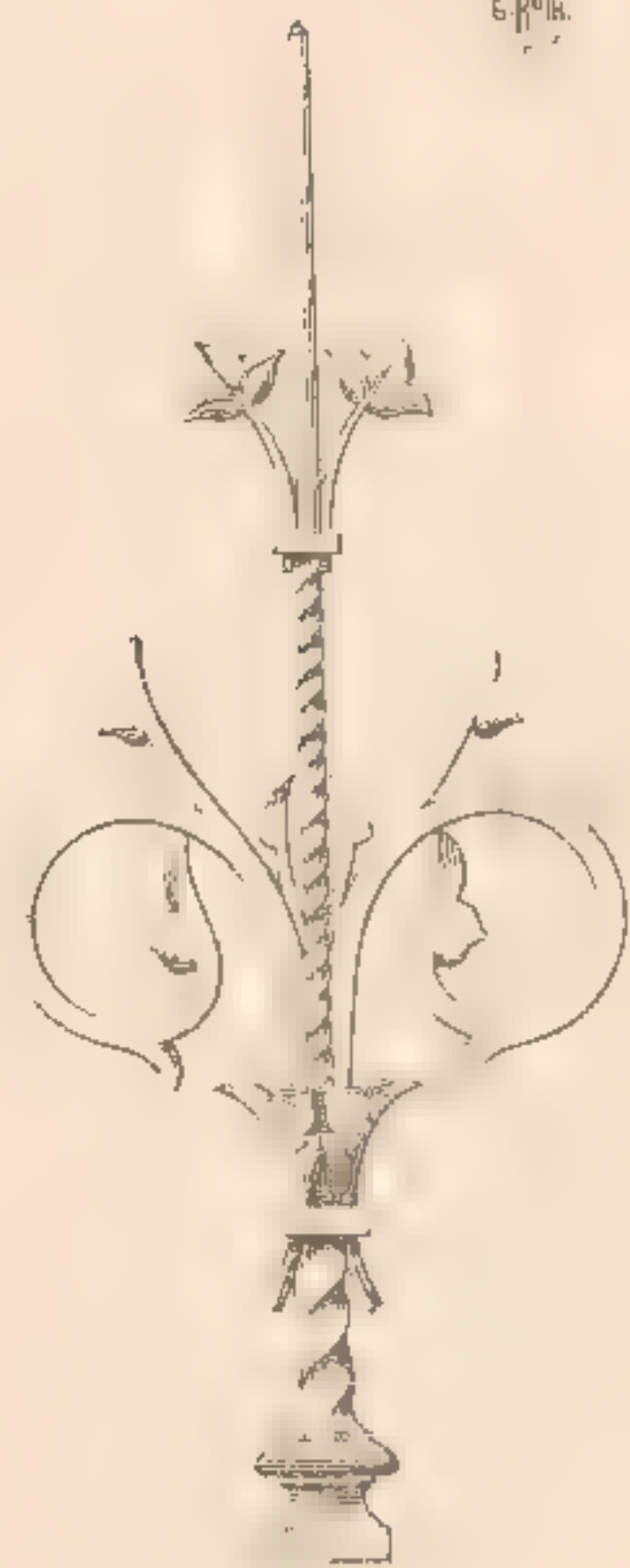
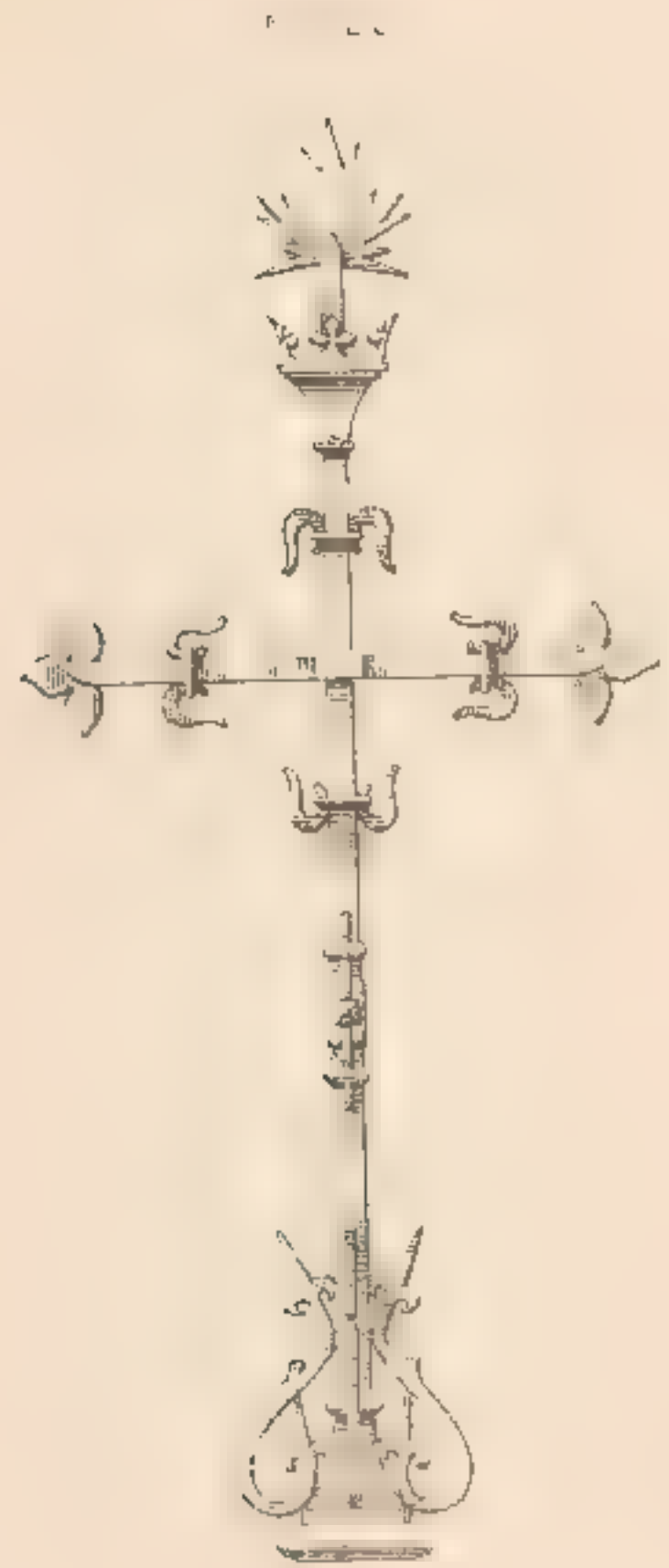
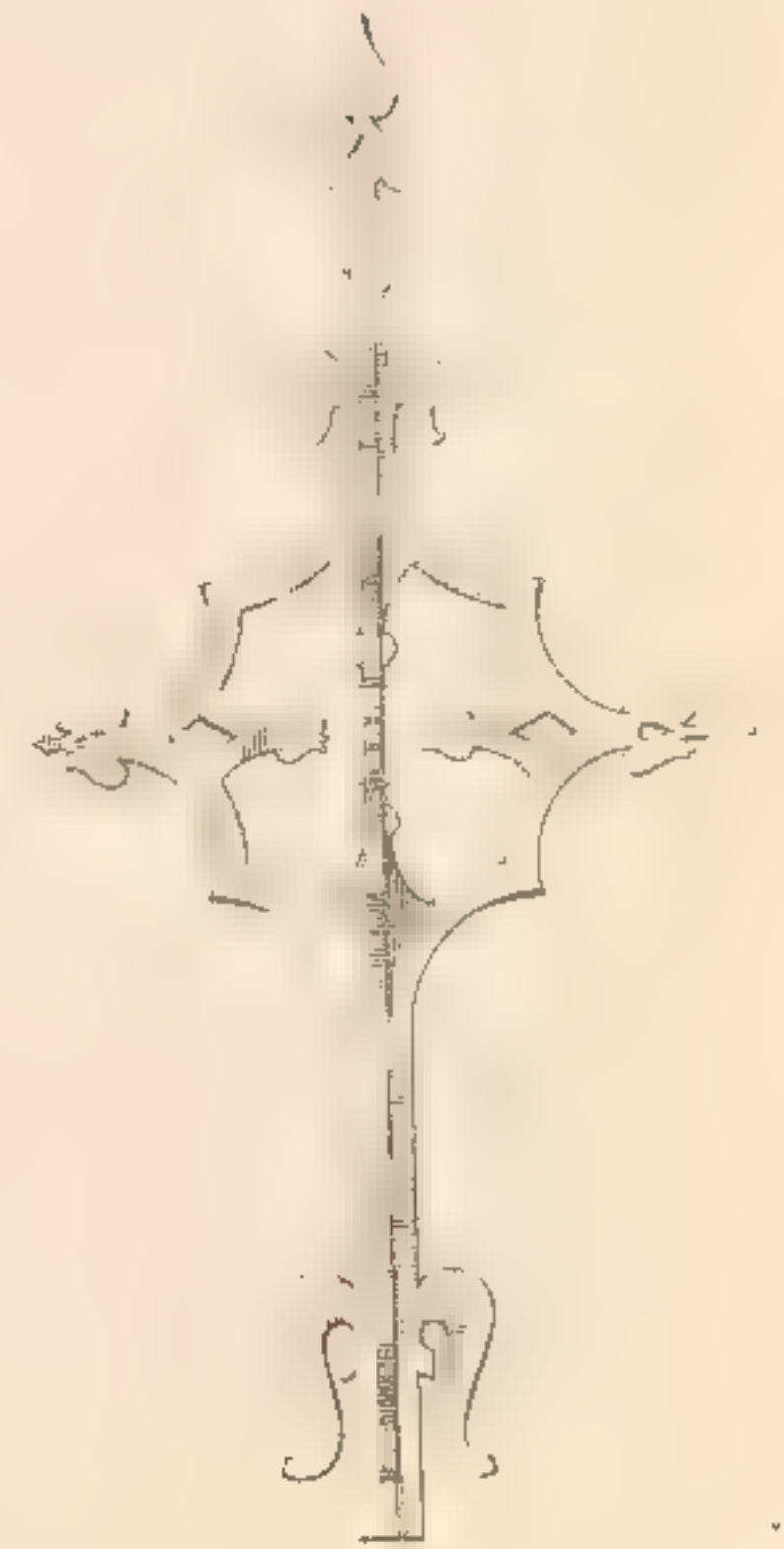
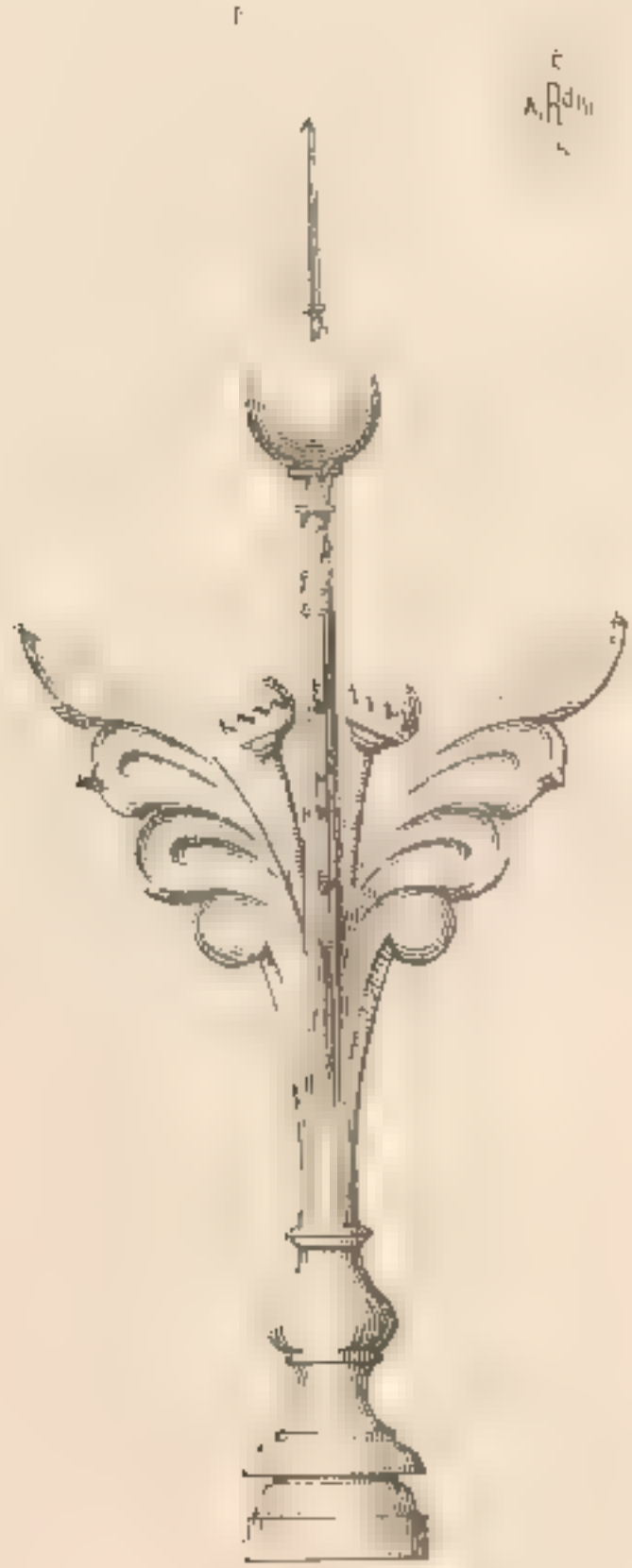
No 6



SCALE 1 INCH = 1 FOOT

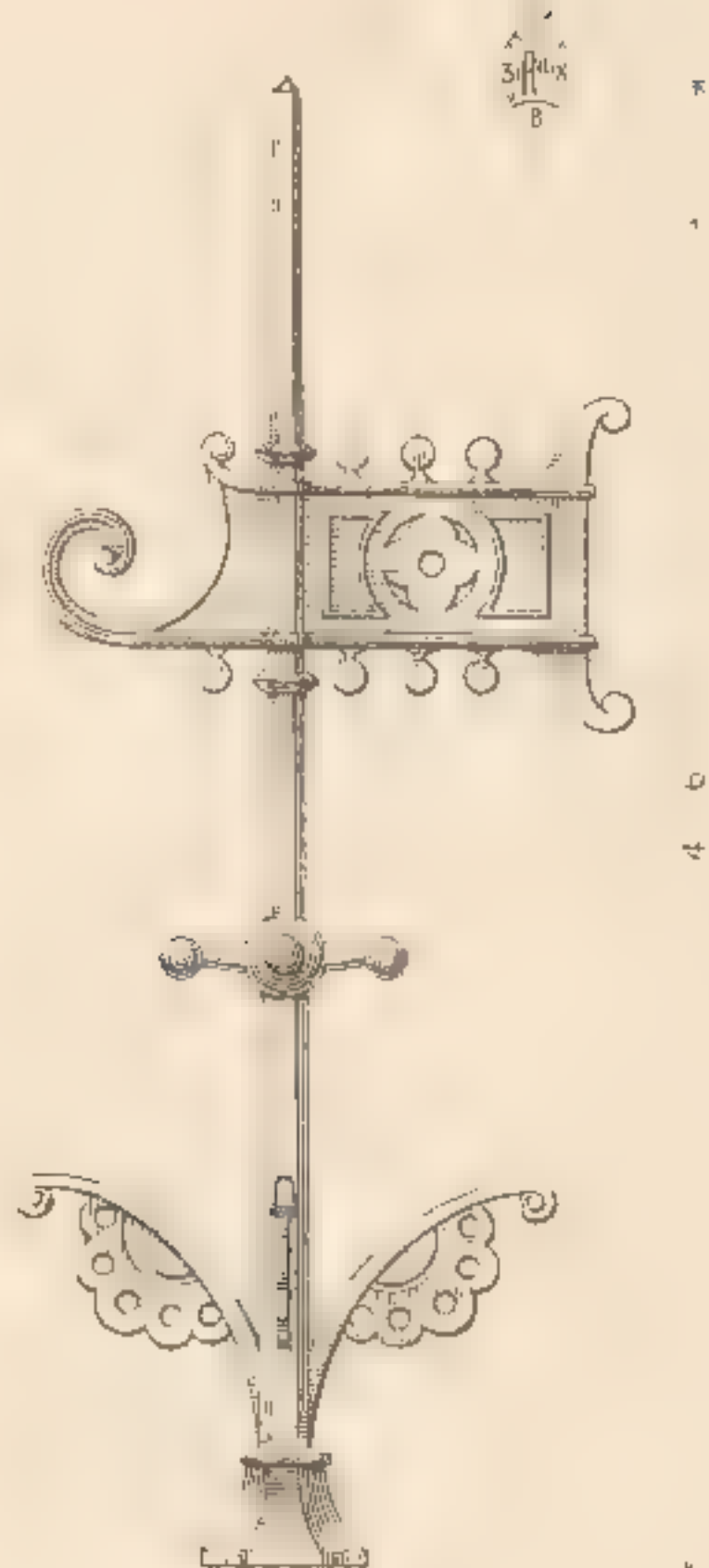
MACFARLANE'S TERMINALS 8

Nº 67

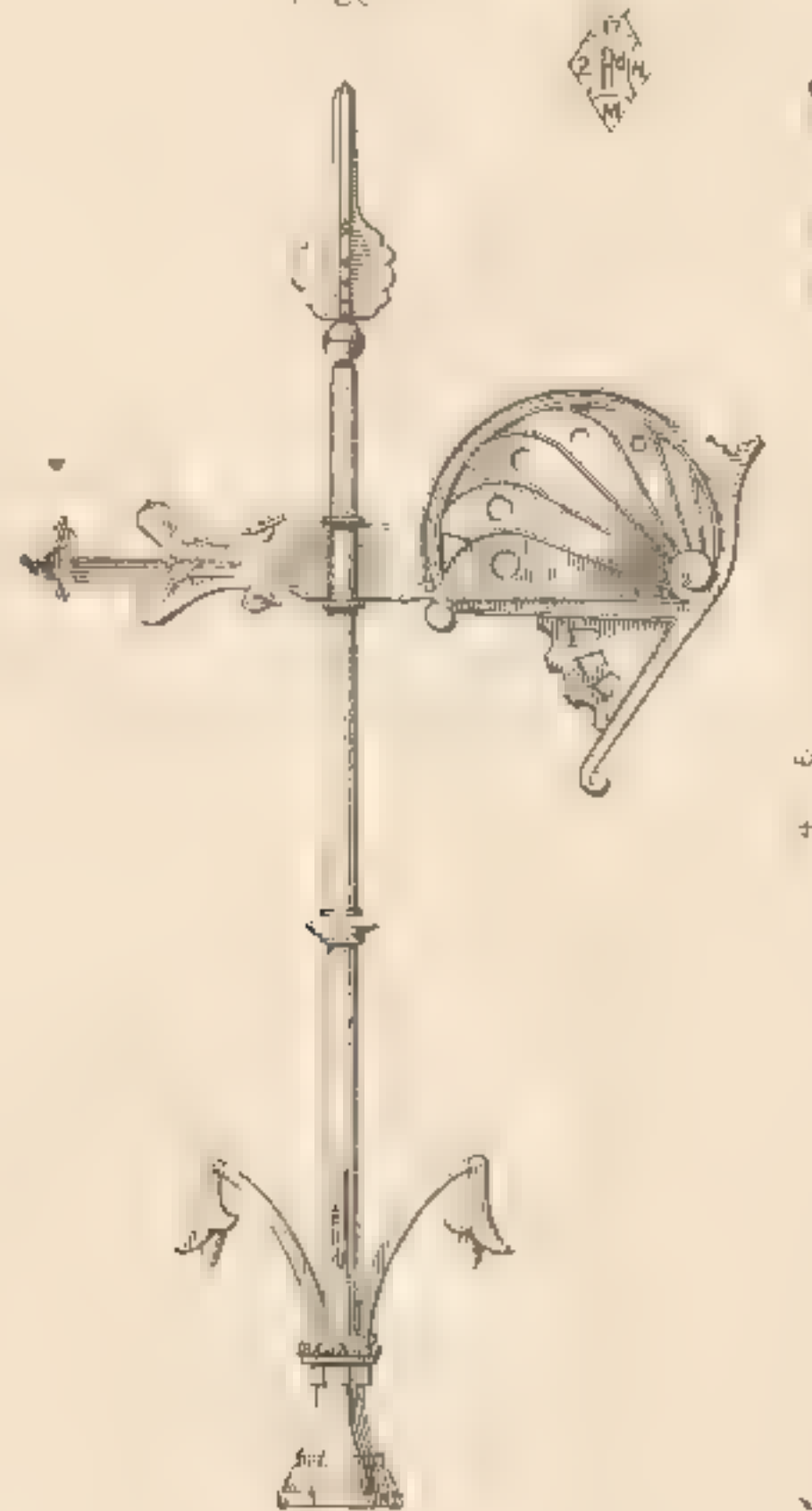


MACFARLANE'S TERMINALS &c

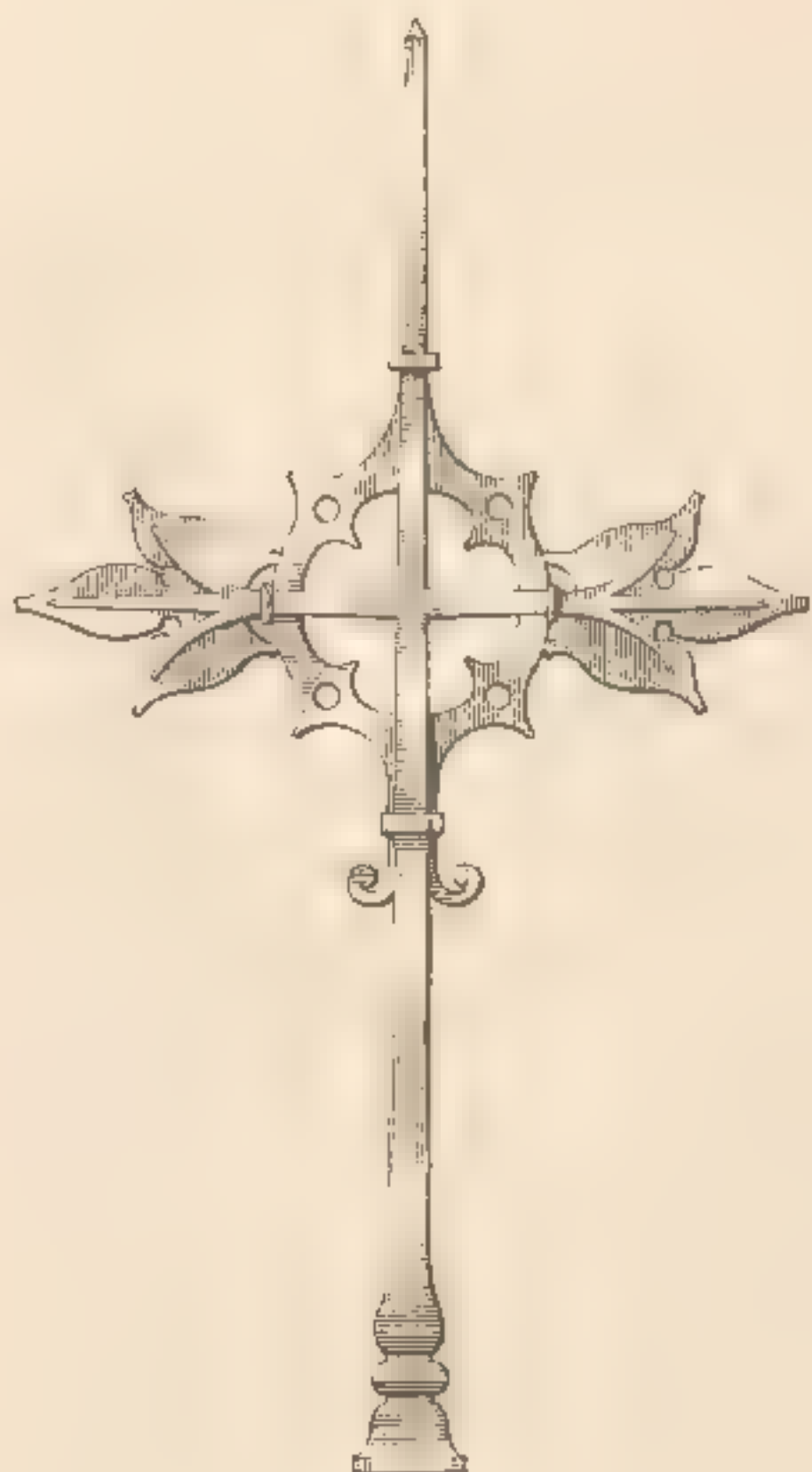
No 58



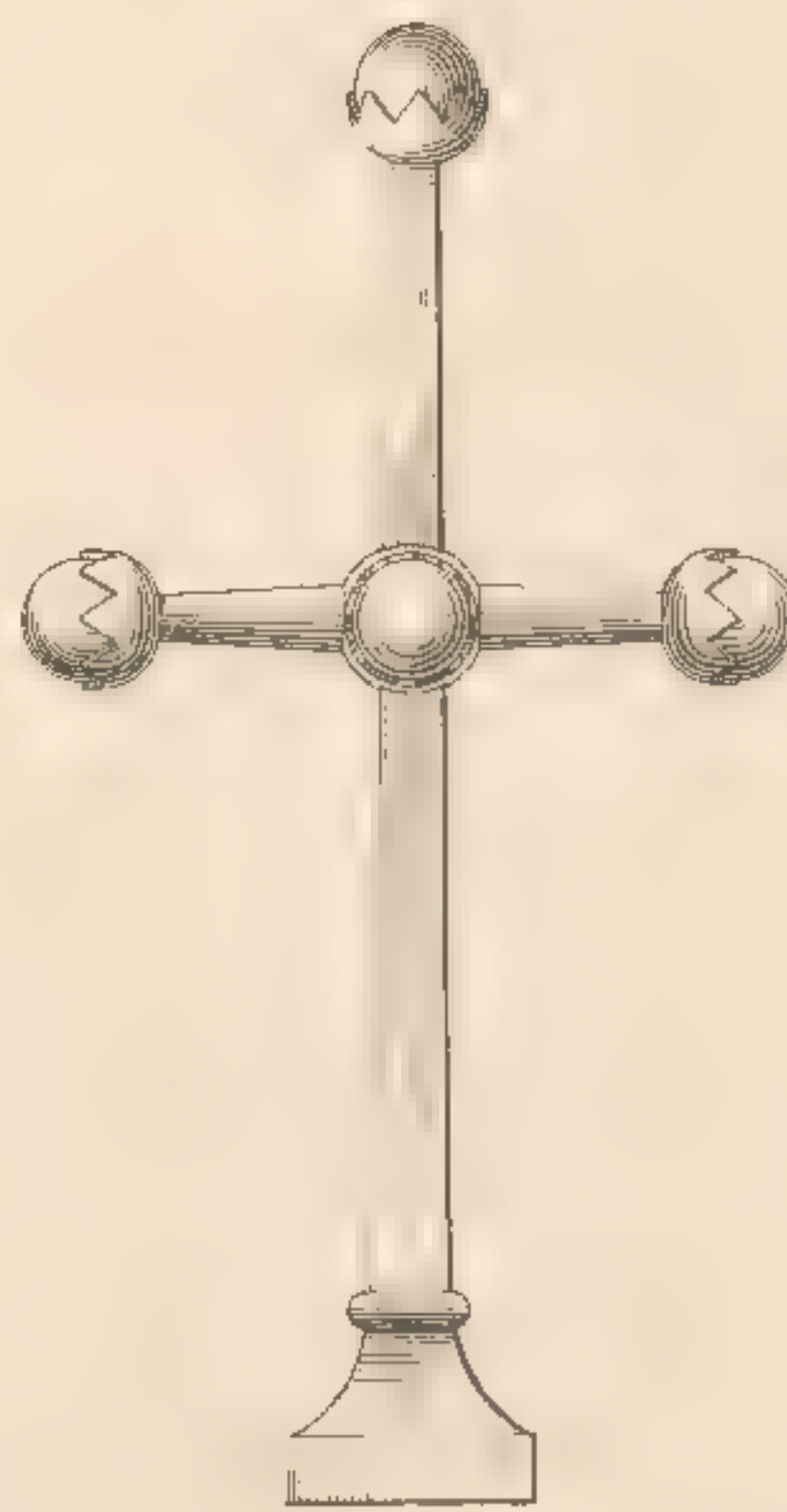
No 67



No 8



No 35

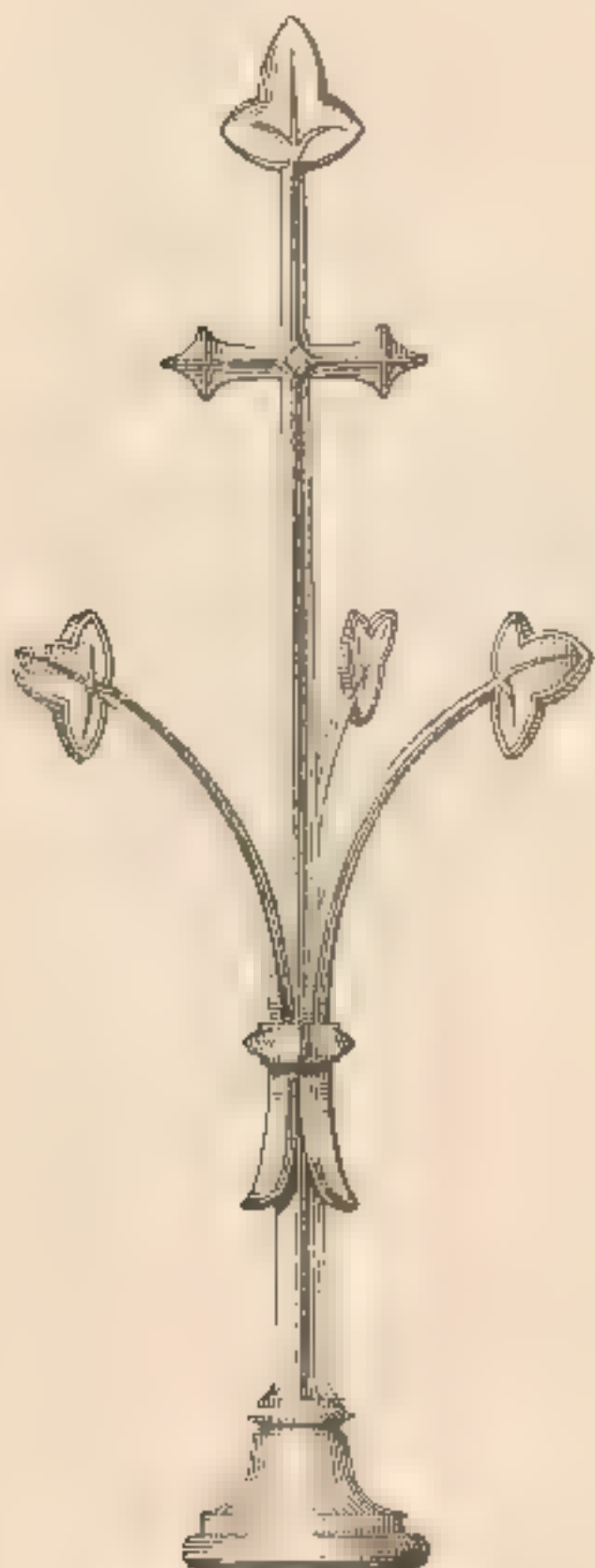


ARMS 2 AND 4 WAYS

SCALE 1 INCH = FOOT

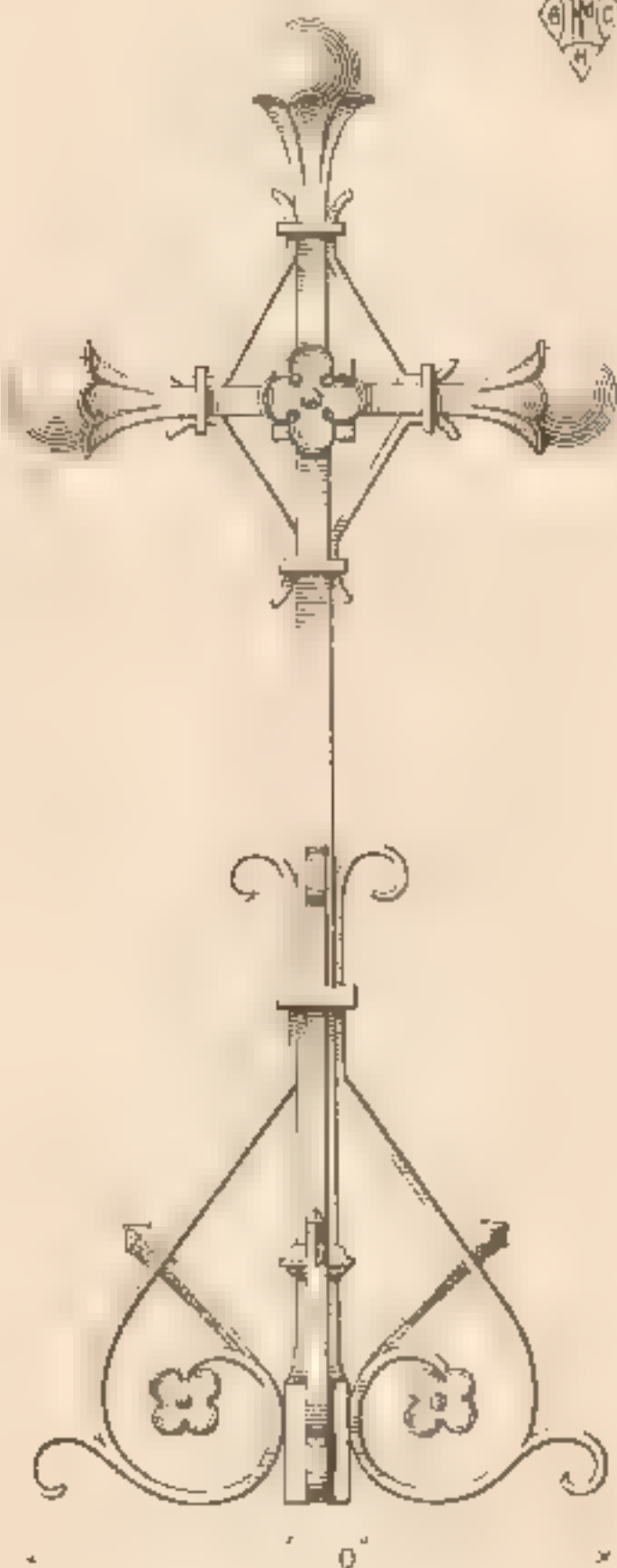
MACFARLANE'S TERMINALS &c

Nº 2



4' 9"

Nº 177



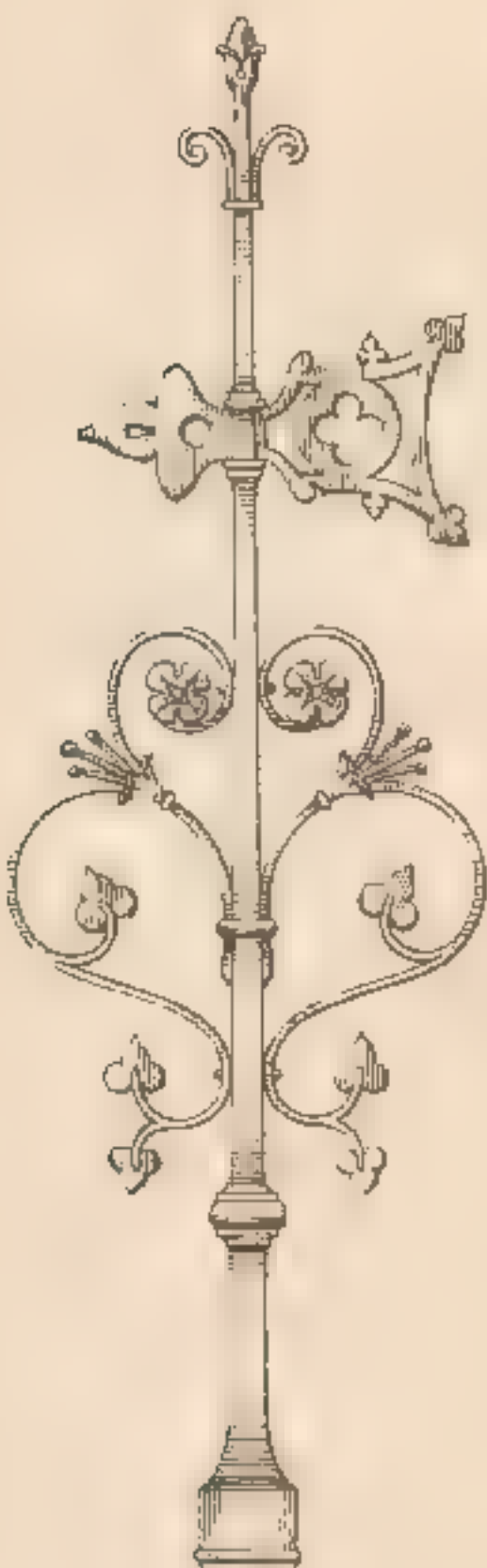
4' 8 1/2"

Nº 224



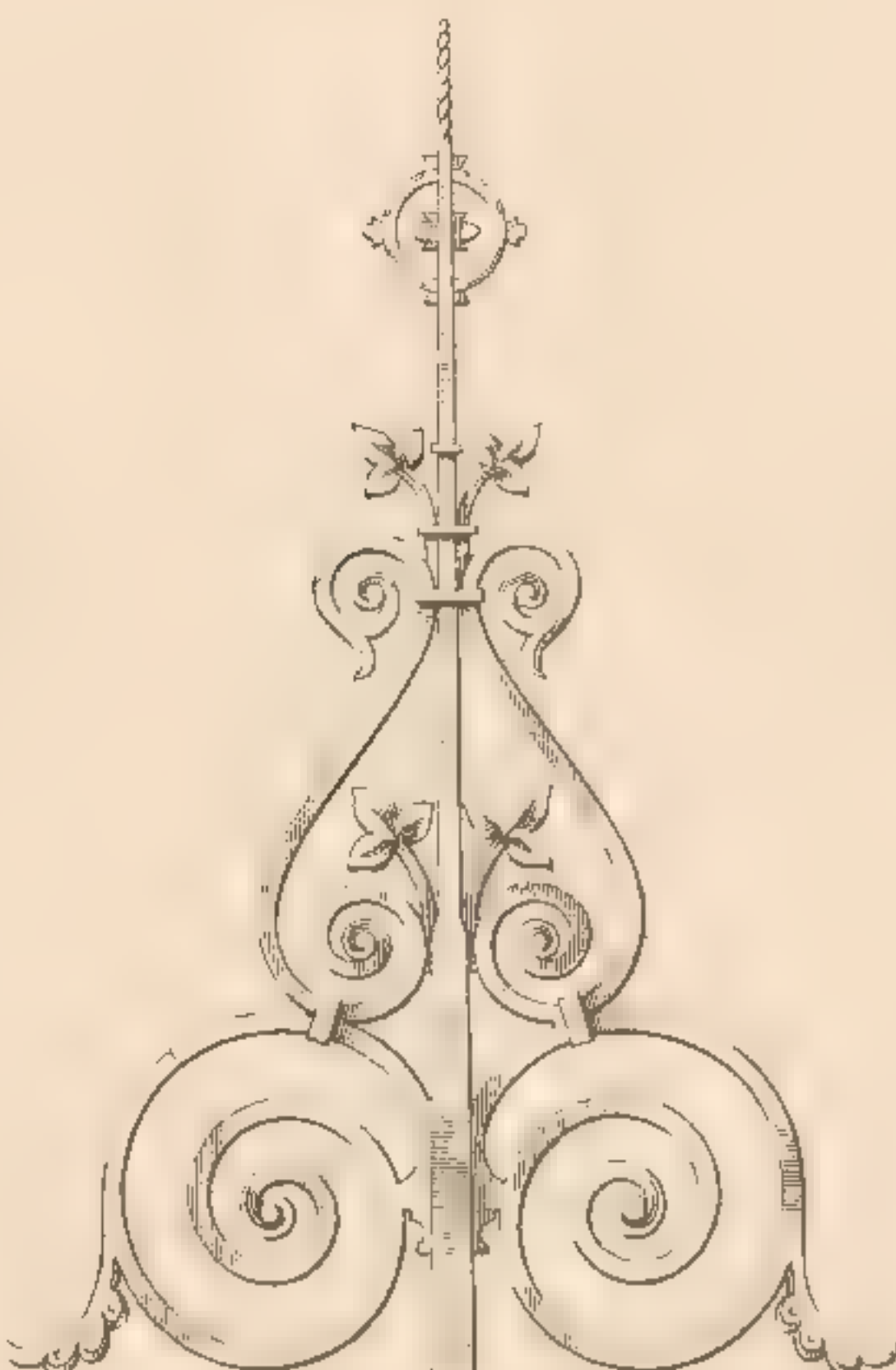
4' 9"

Nº 55



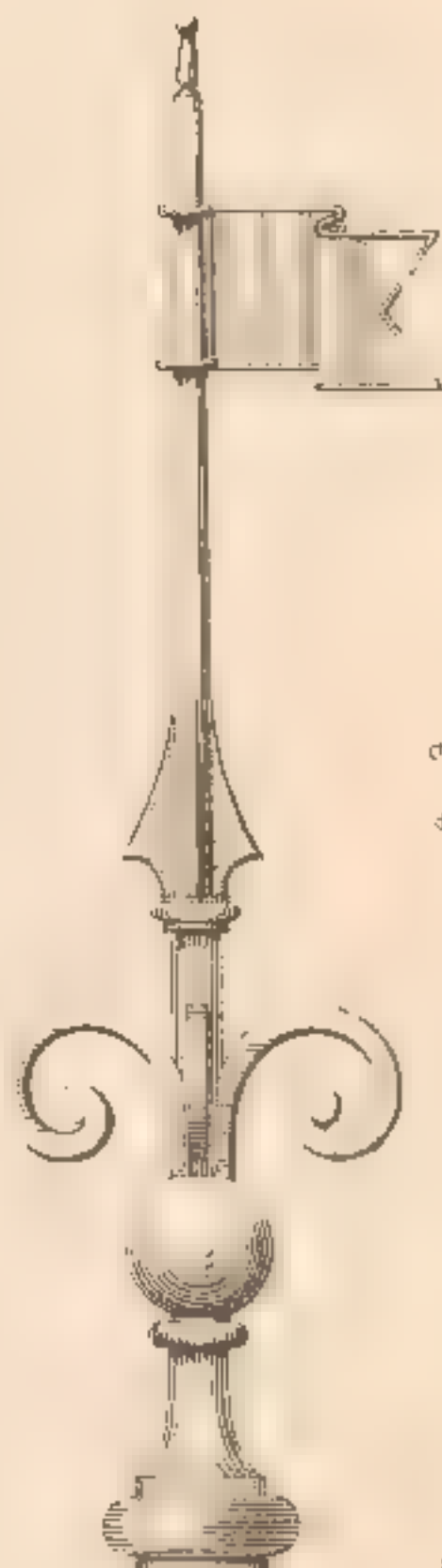
4' 9"

Nº 38



4' 8 1/2"

Nº 53



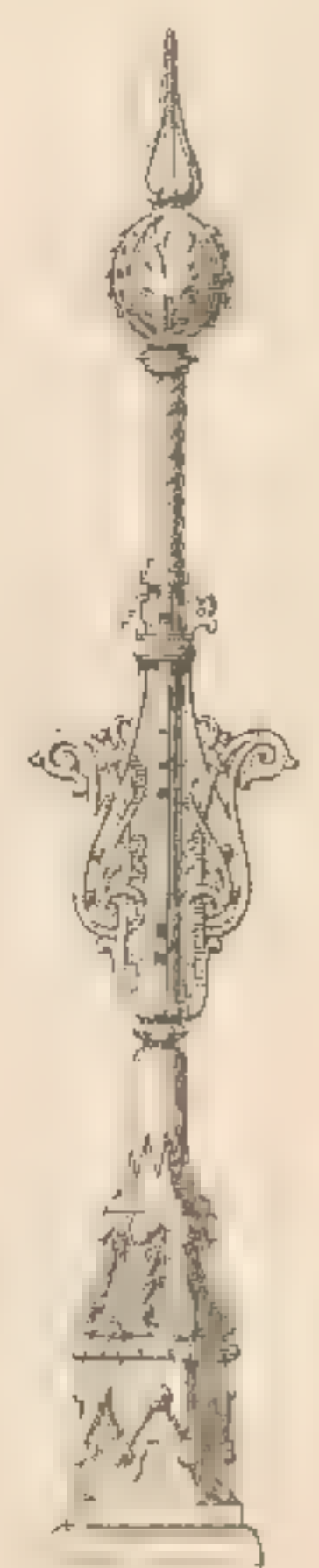
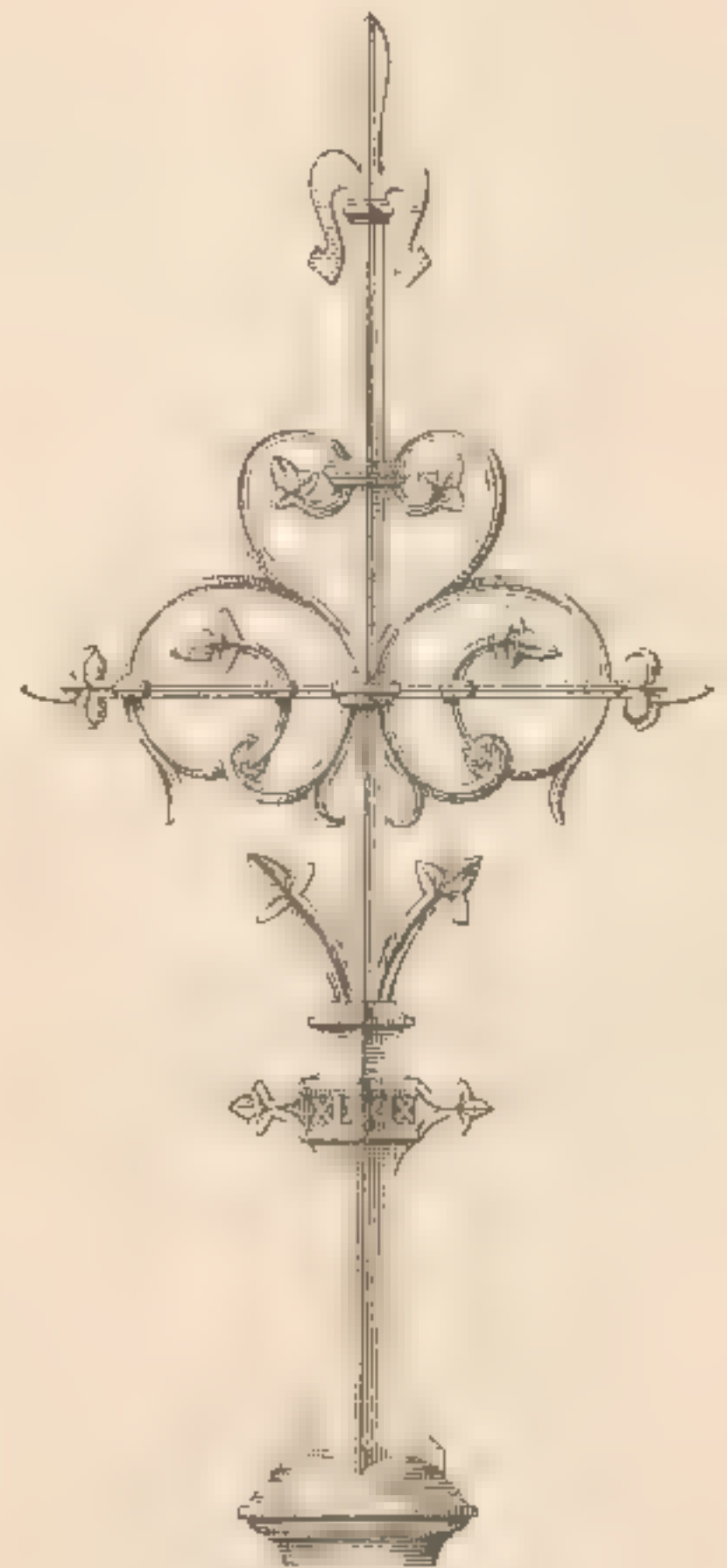
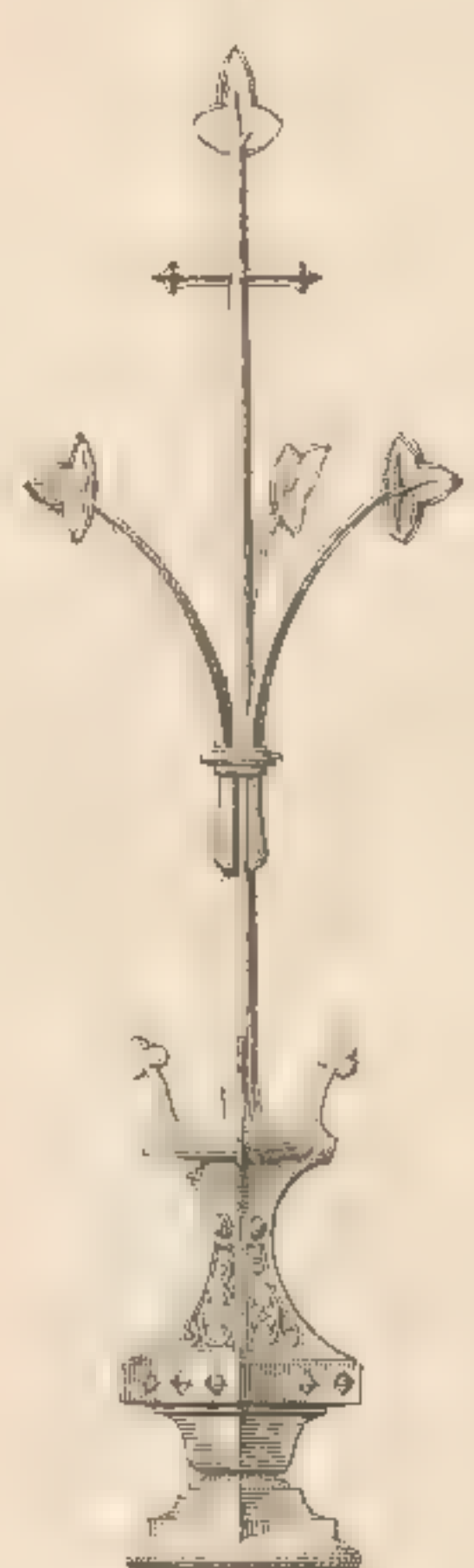
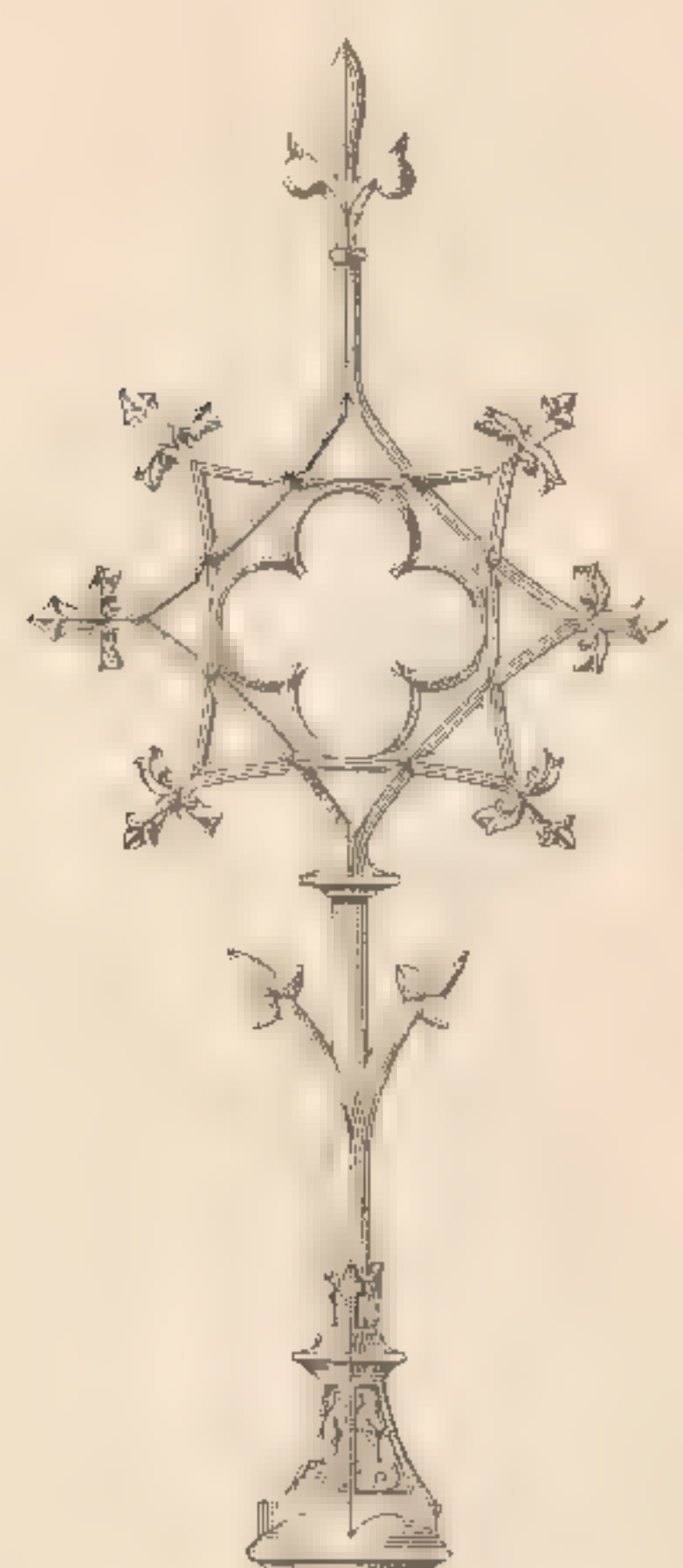
4' 9"

ARMS 2 AND 4 WAYS

3 2

SCALE INCH = 1 FOOT

MACFARLANE'S TERMINALS &c
N^o 22



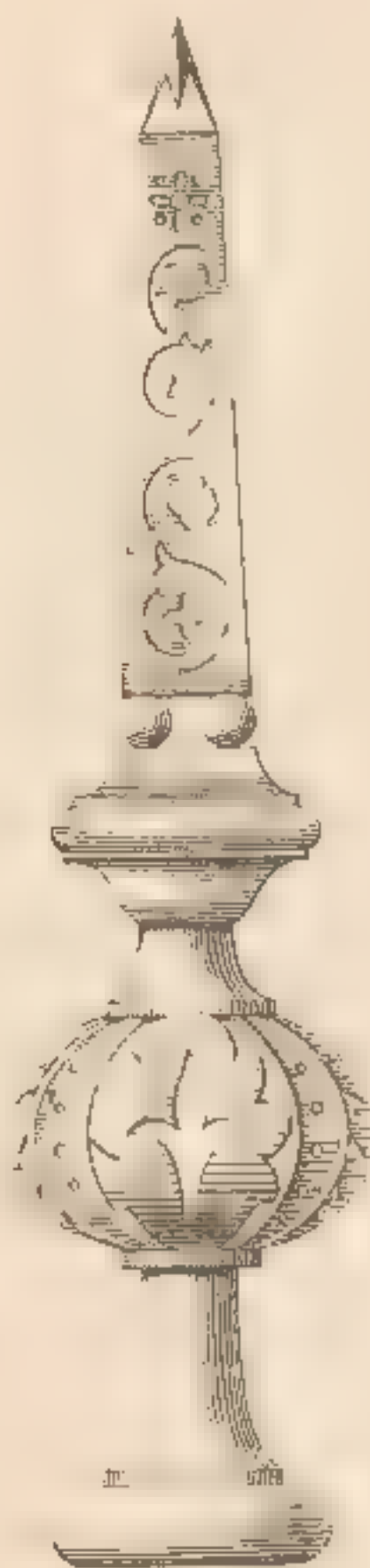
ARMS 2 AND 4 WAYS
SCALE 1 INCH = FOOT

MACFARLANE'S TERMINALS &c

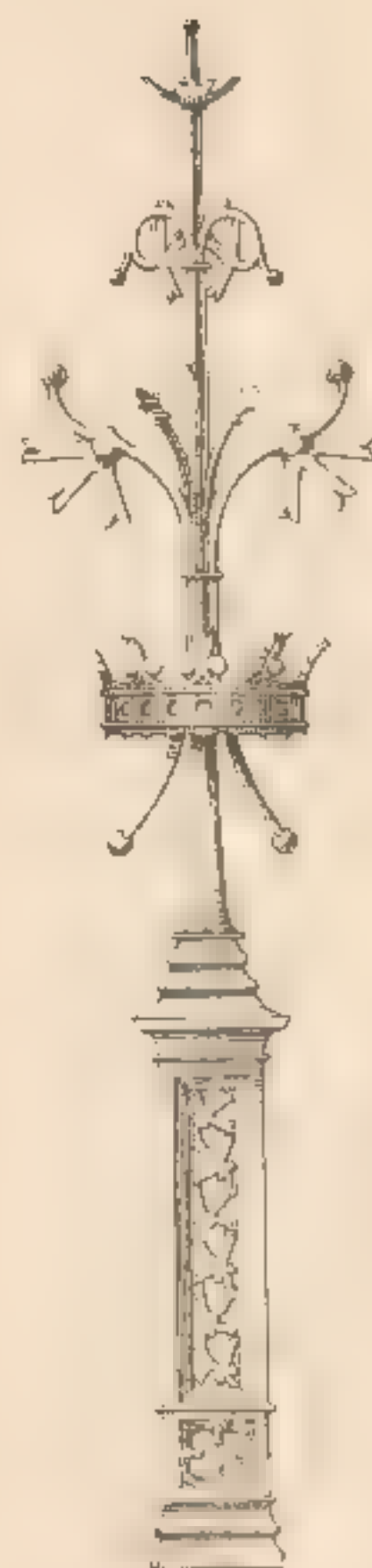
No 30



No 33



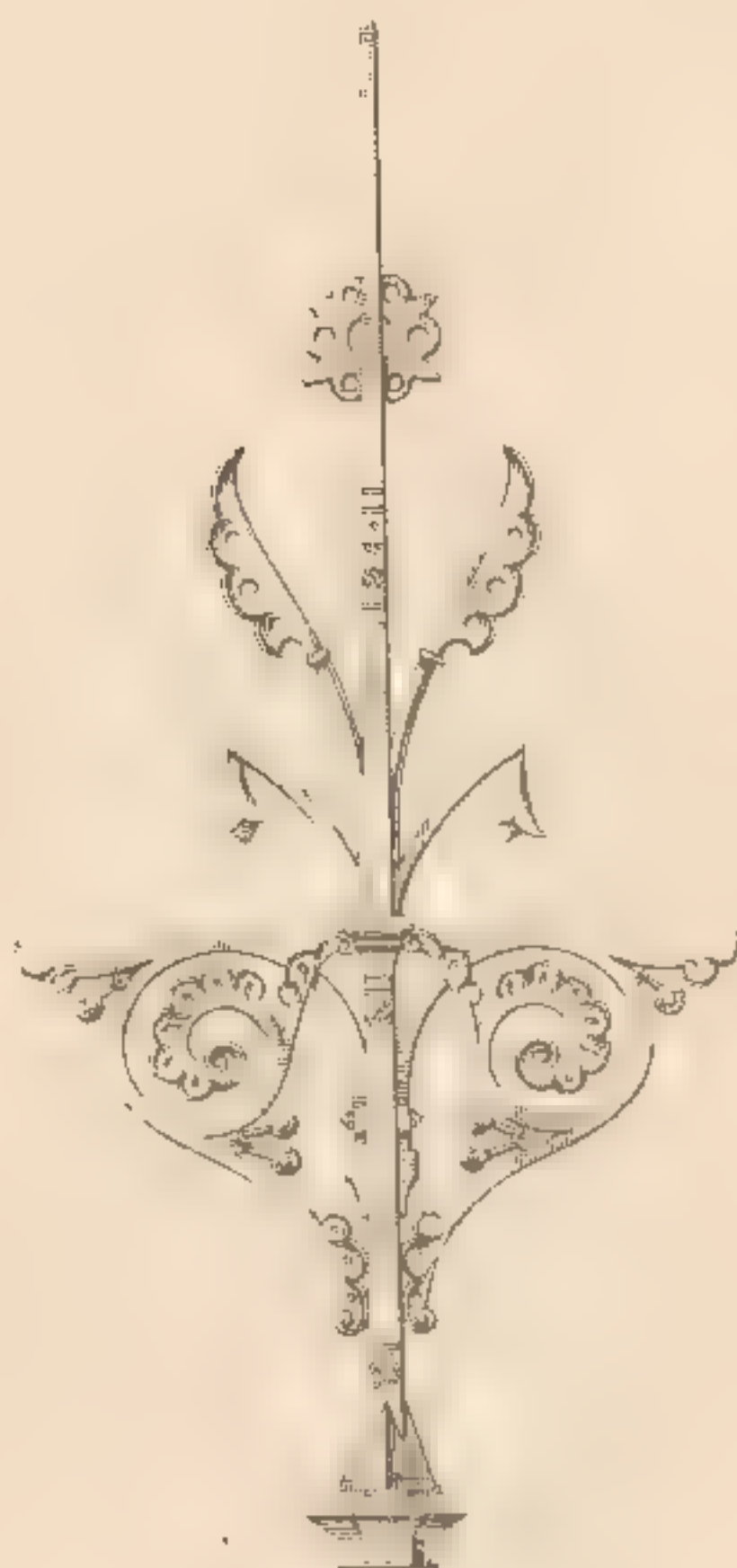
No 3



No 52



No 46



No 28



ARMS 2 AND 4 WAYS

SCALE 1 INCH

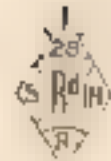
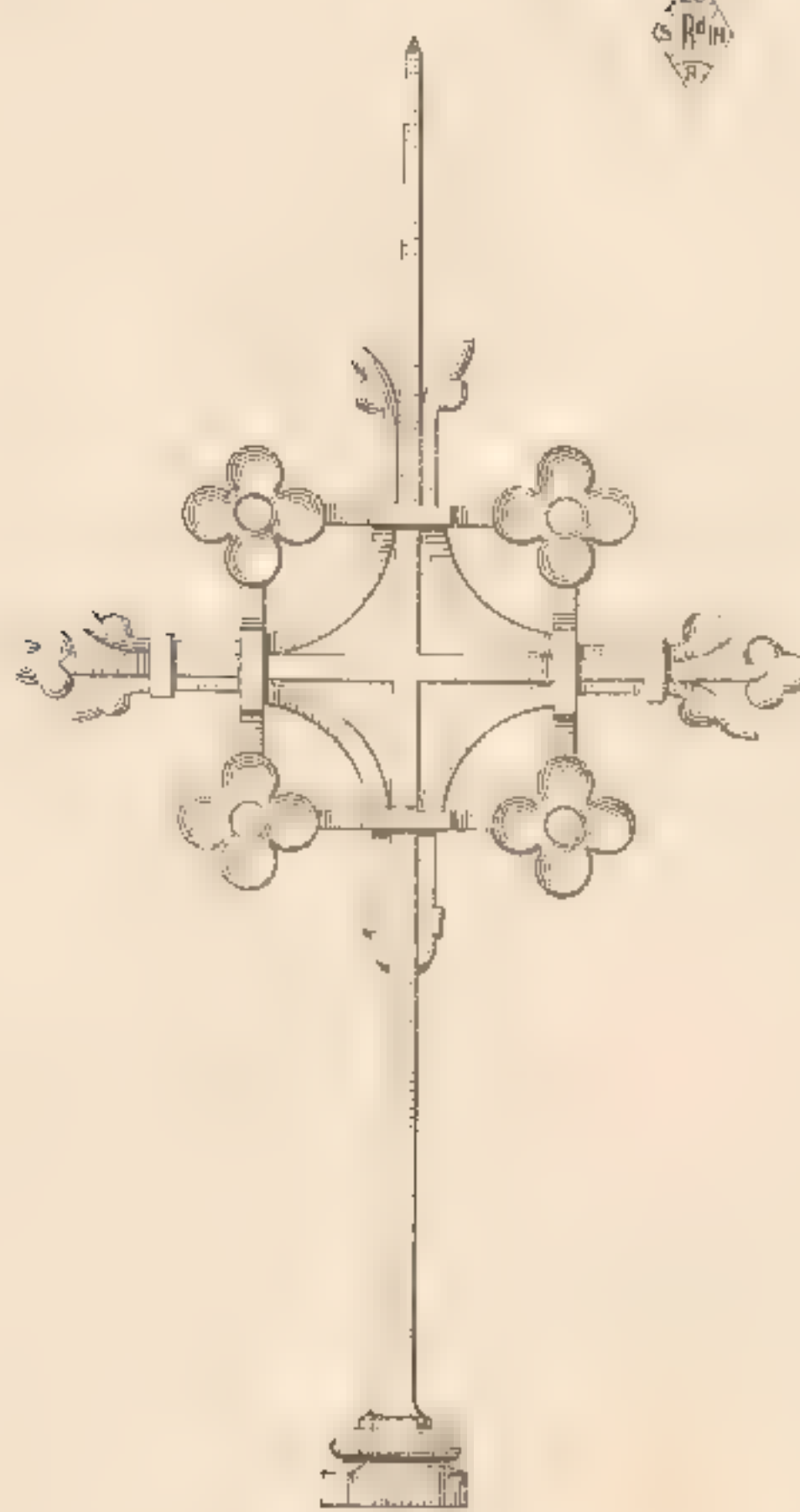
MACFARLANE'S TERMINALS &c

No 25

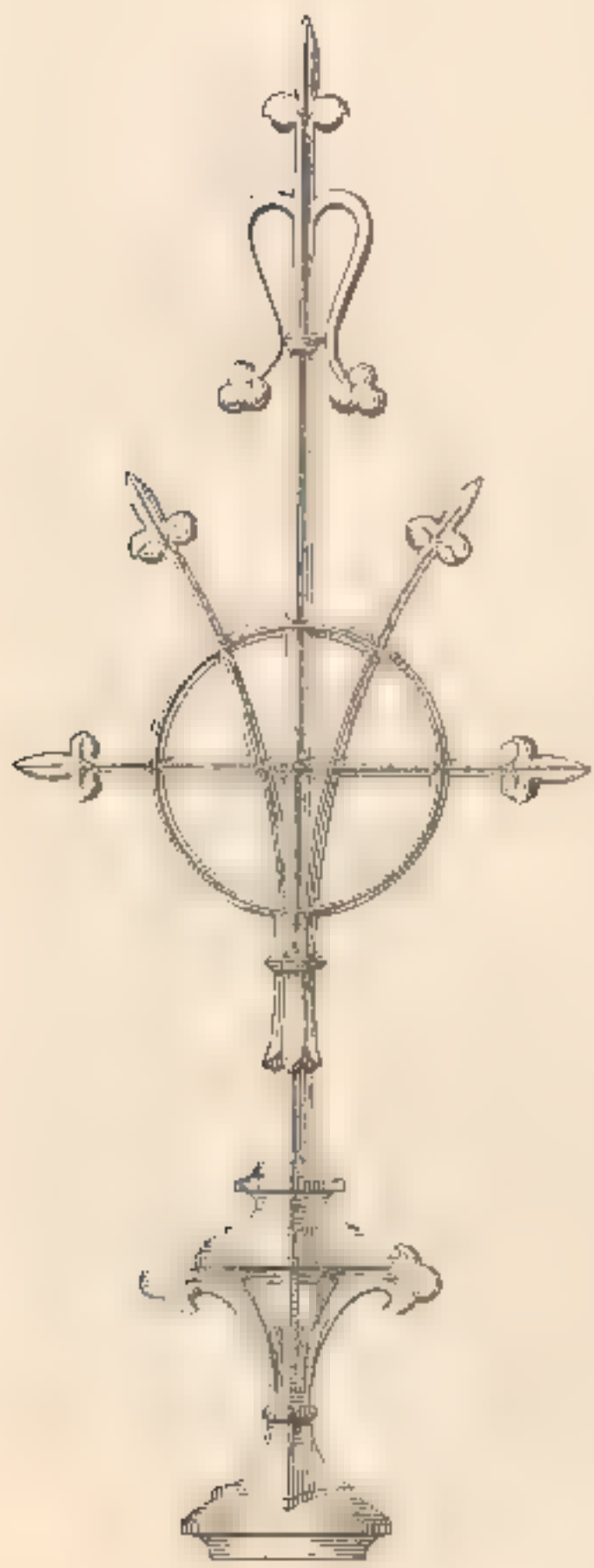


ARM L AND 4 ARMS

No 134

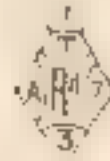
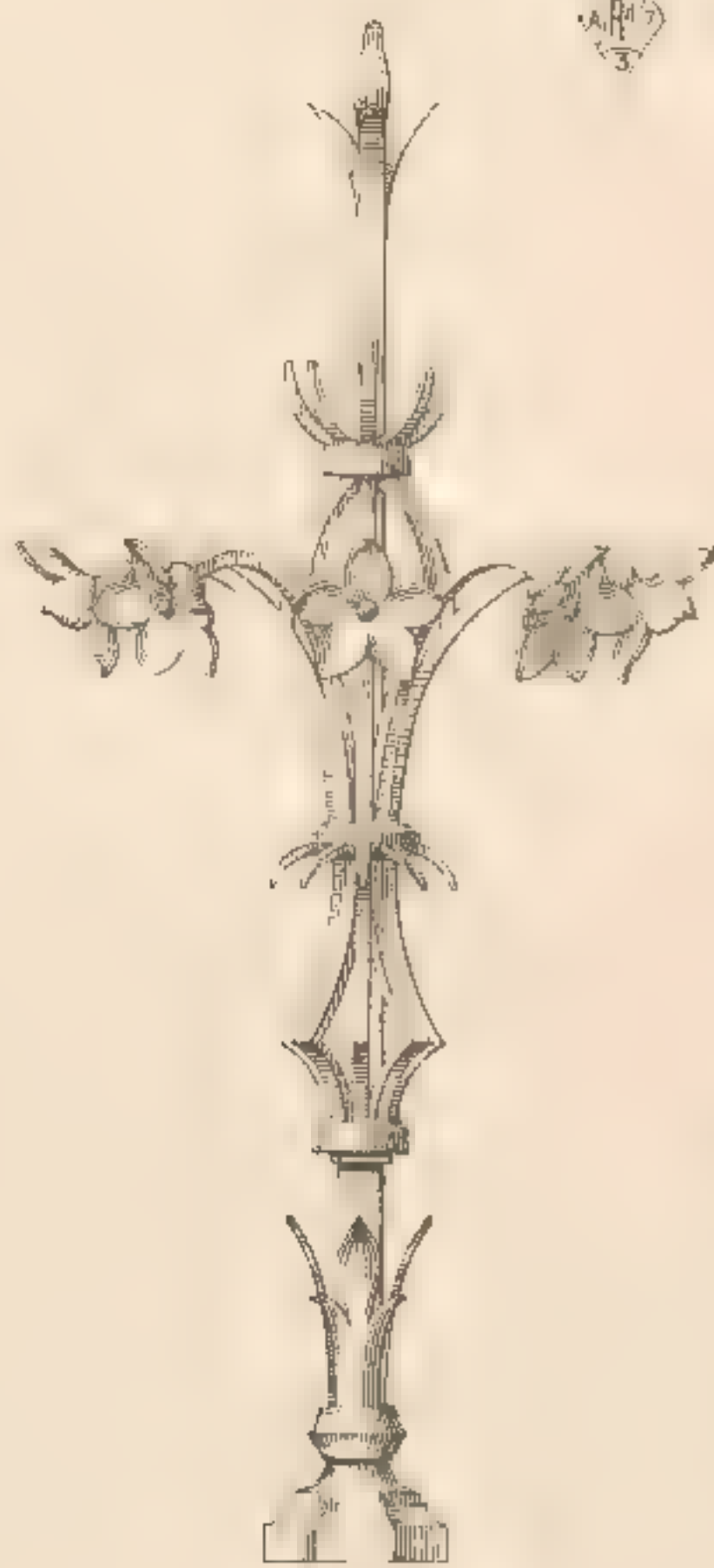


No 24



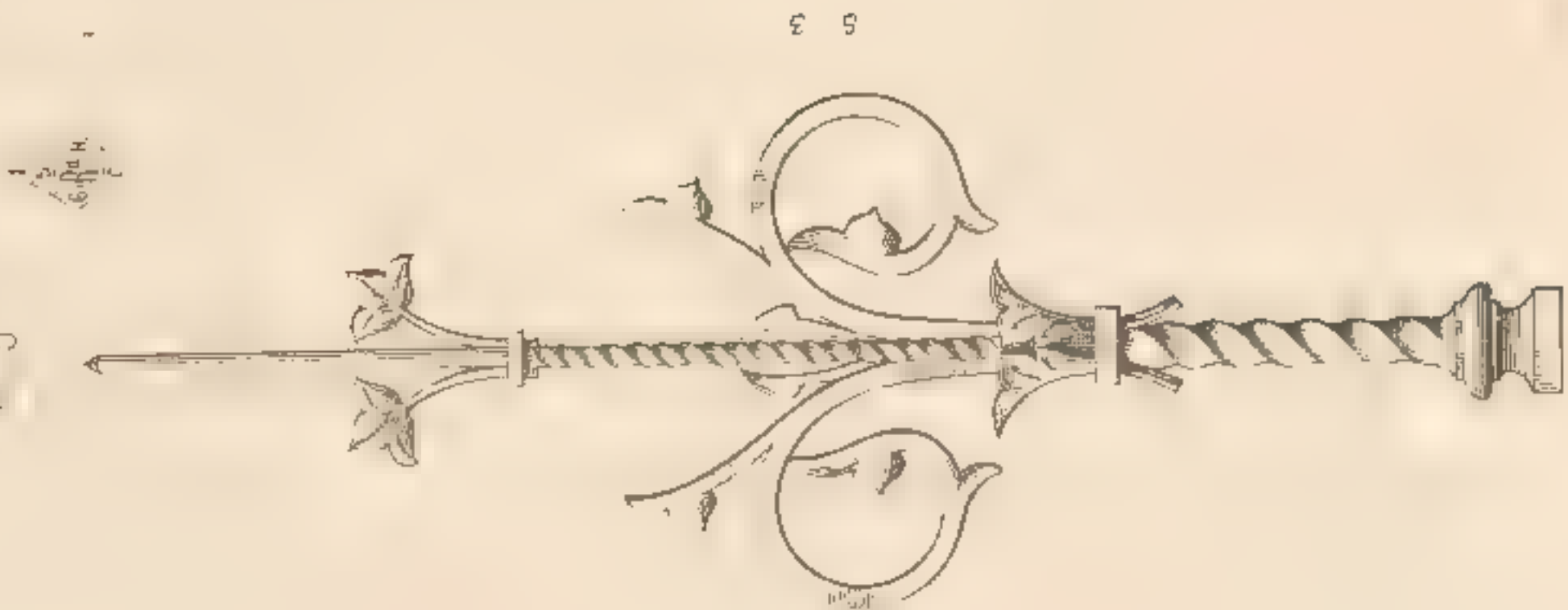
5 1/2

No 54

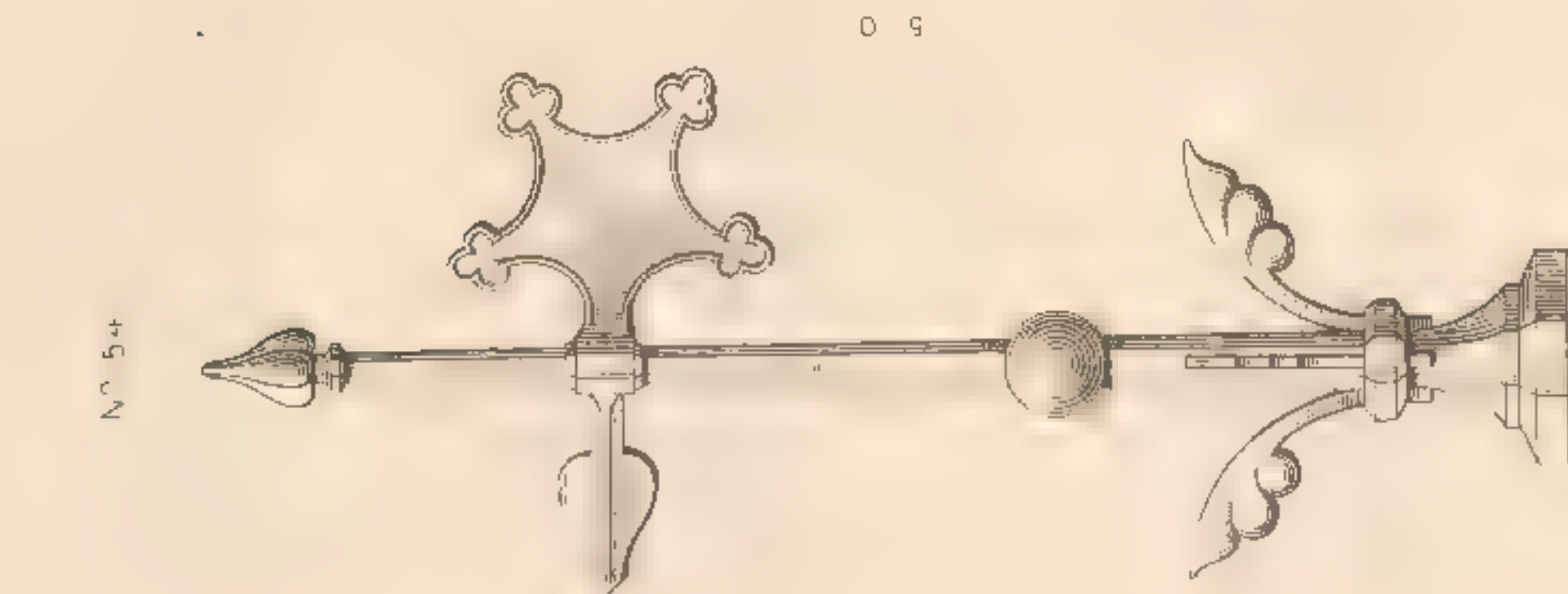
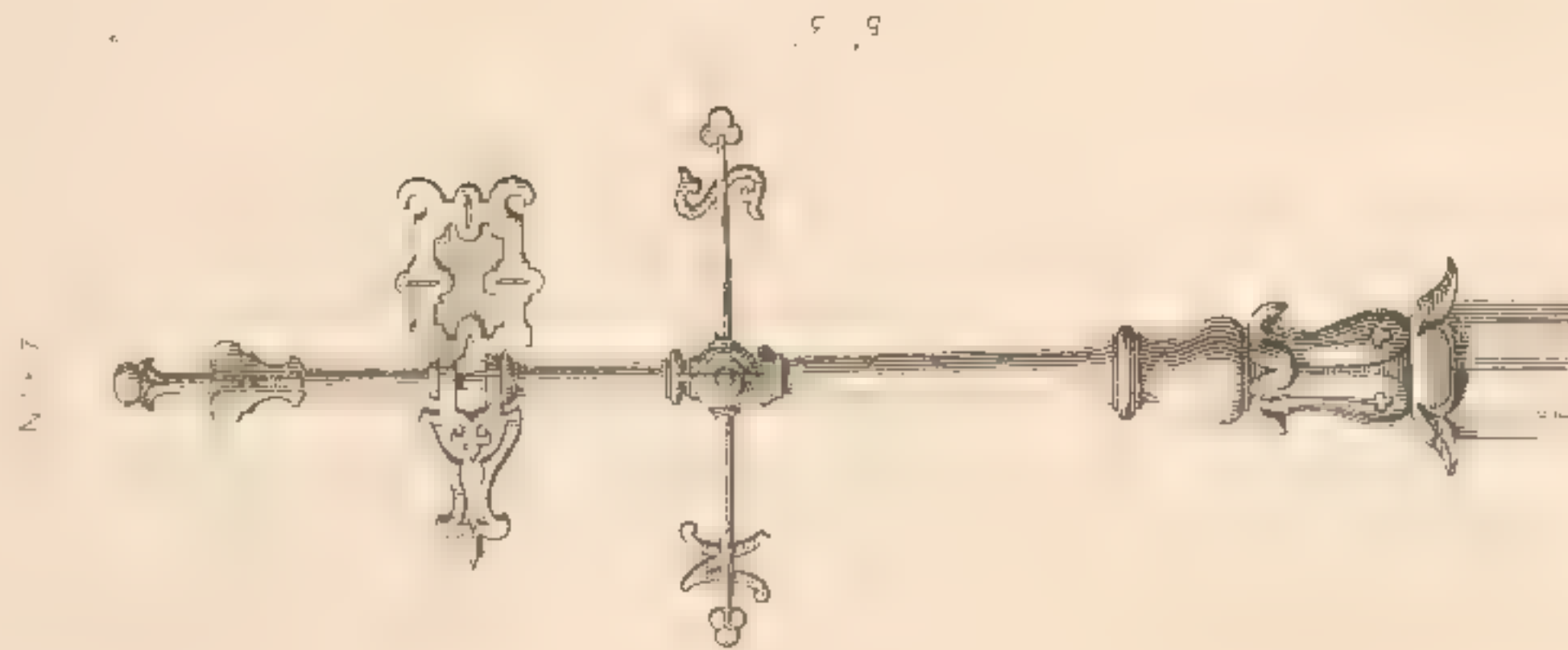
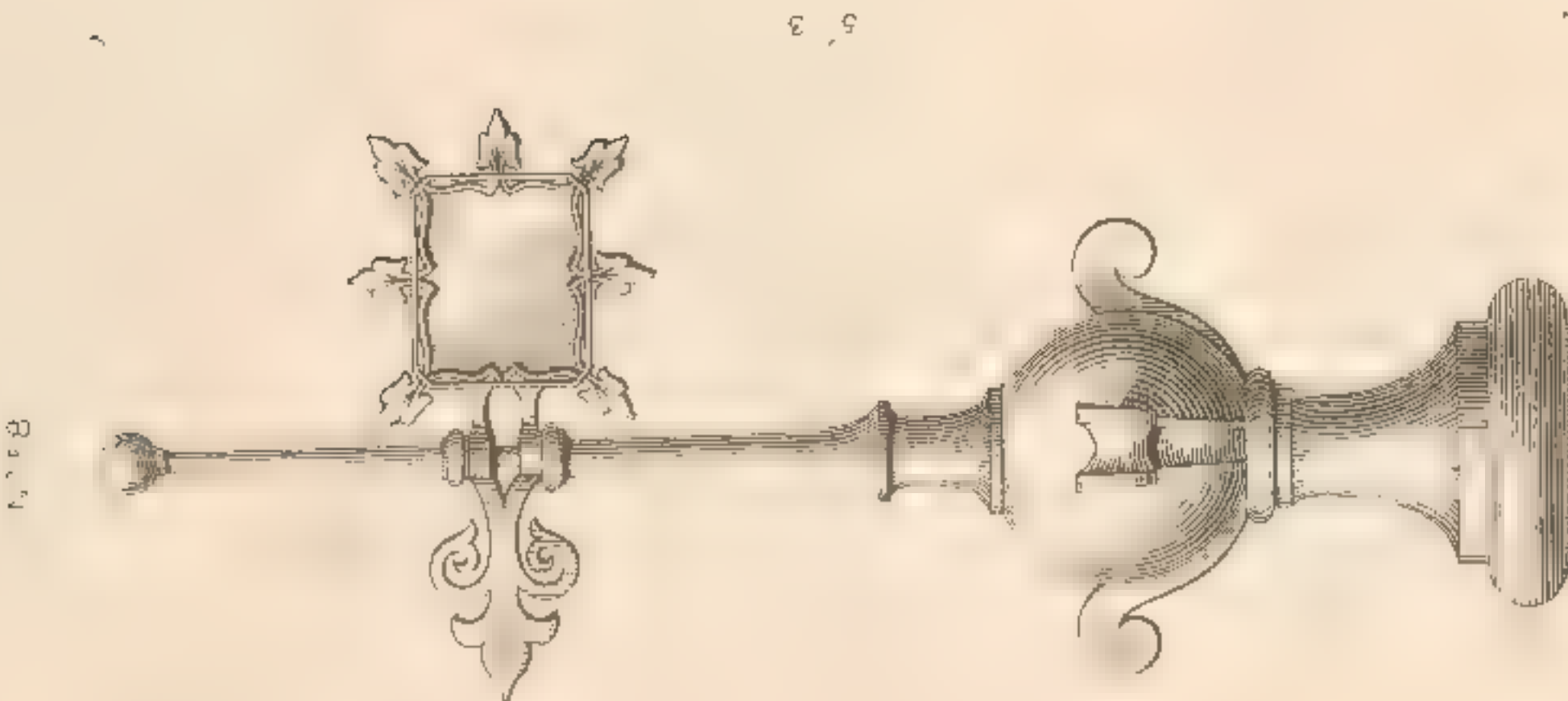


SCALE 1 INCH = 1 FOOT

MACFARLANE'S TERMINALS & C

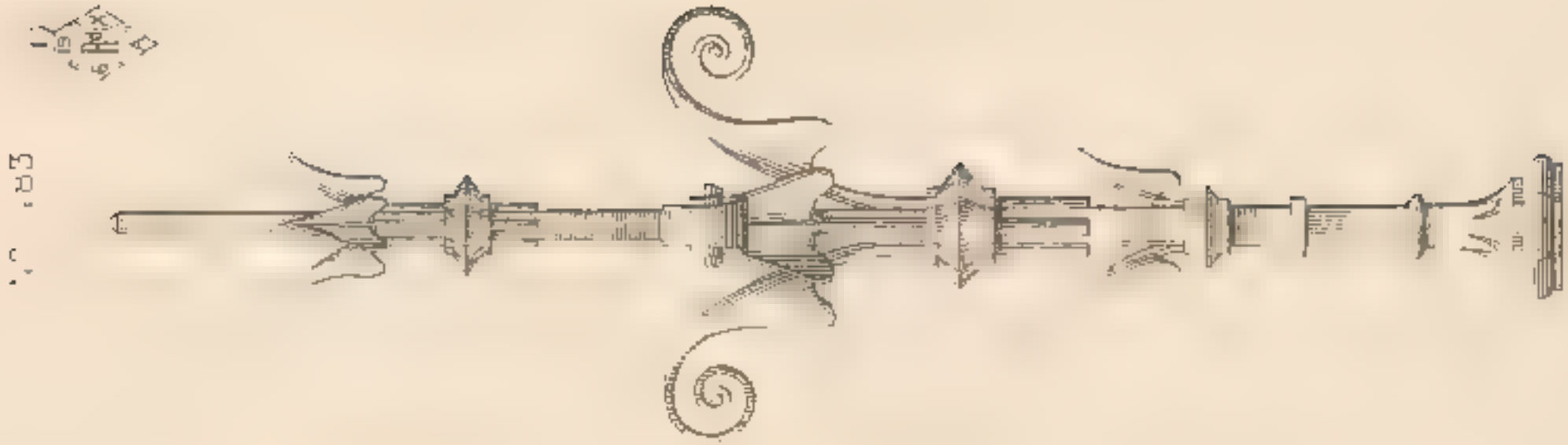


ARMS 2 AND 4 WAYS

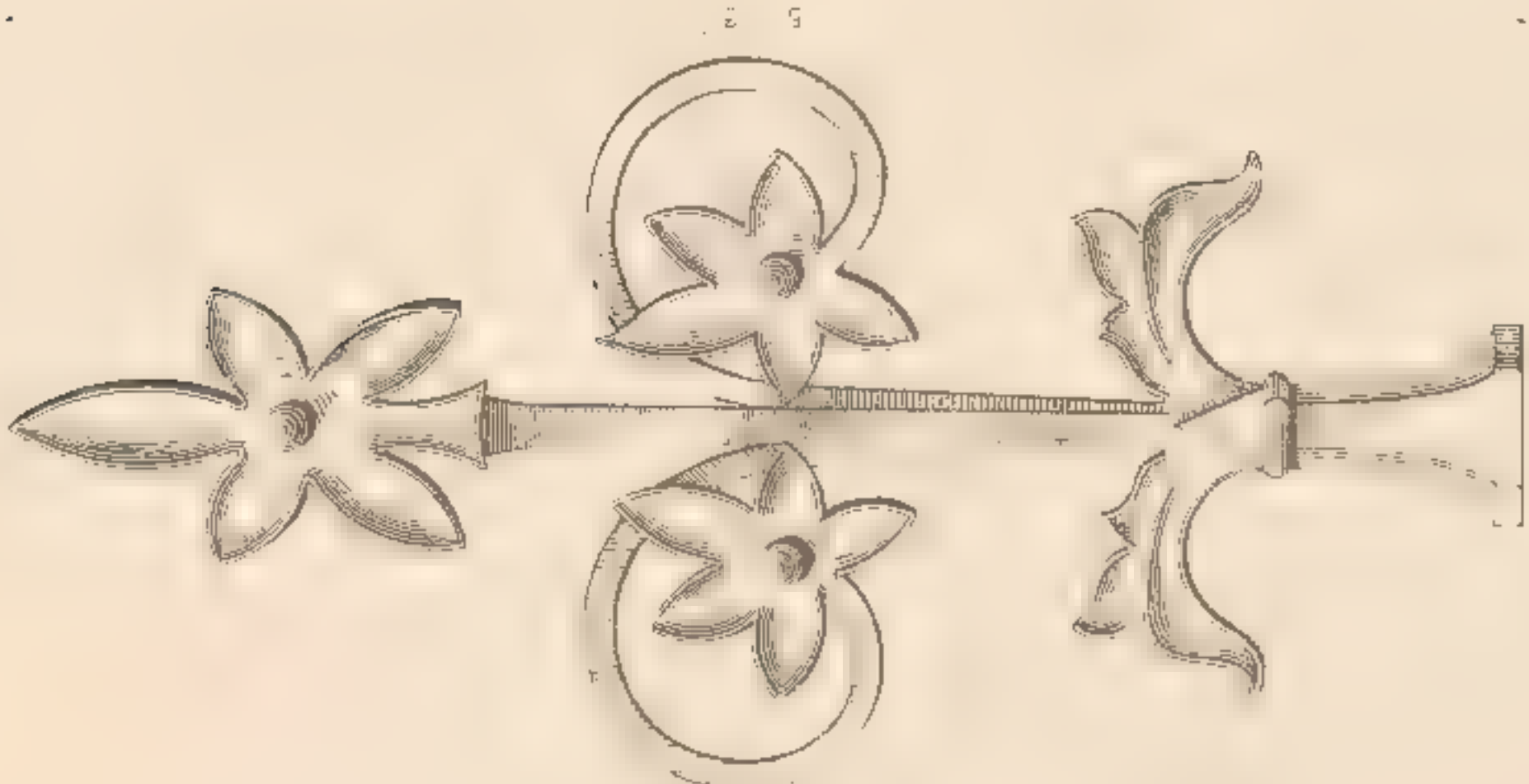


SCALE 1 INCH = FOOT

MACFARLANE'S TERMINALS &c



No 139.



ARMS 2 AND 4 WAYS



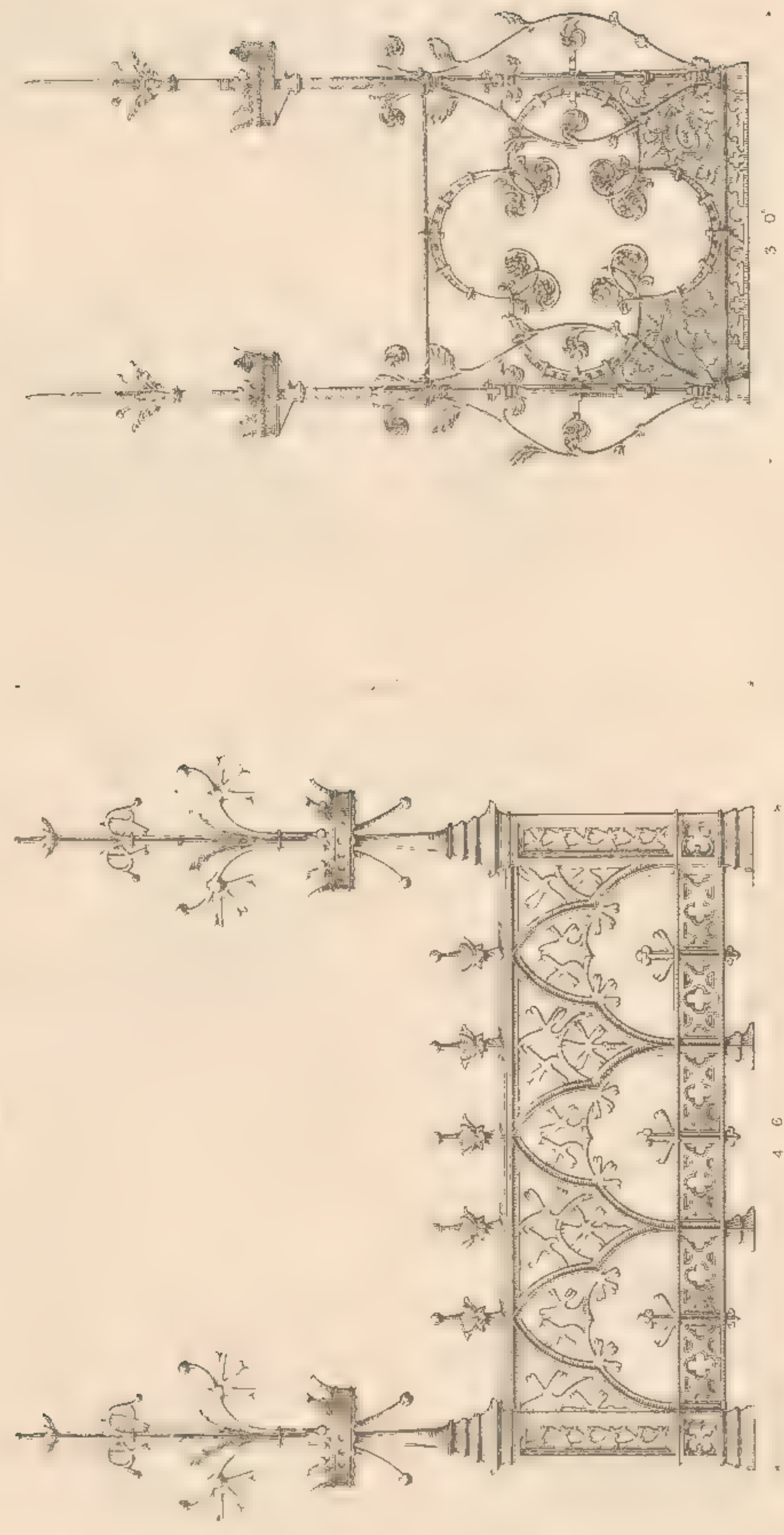
ARMS 2 AND 4 WAYS



ARMS 2 AND 4 WAYS

SCALE INCH = 1 FOOT

MACFARLANE'S TERMINALS 3.

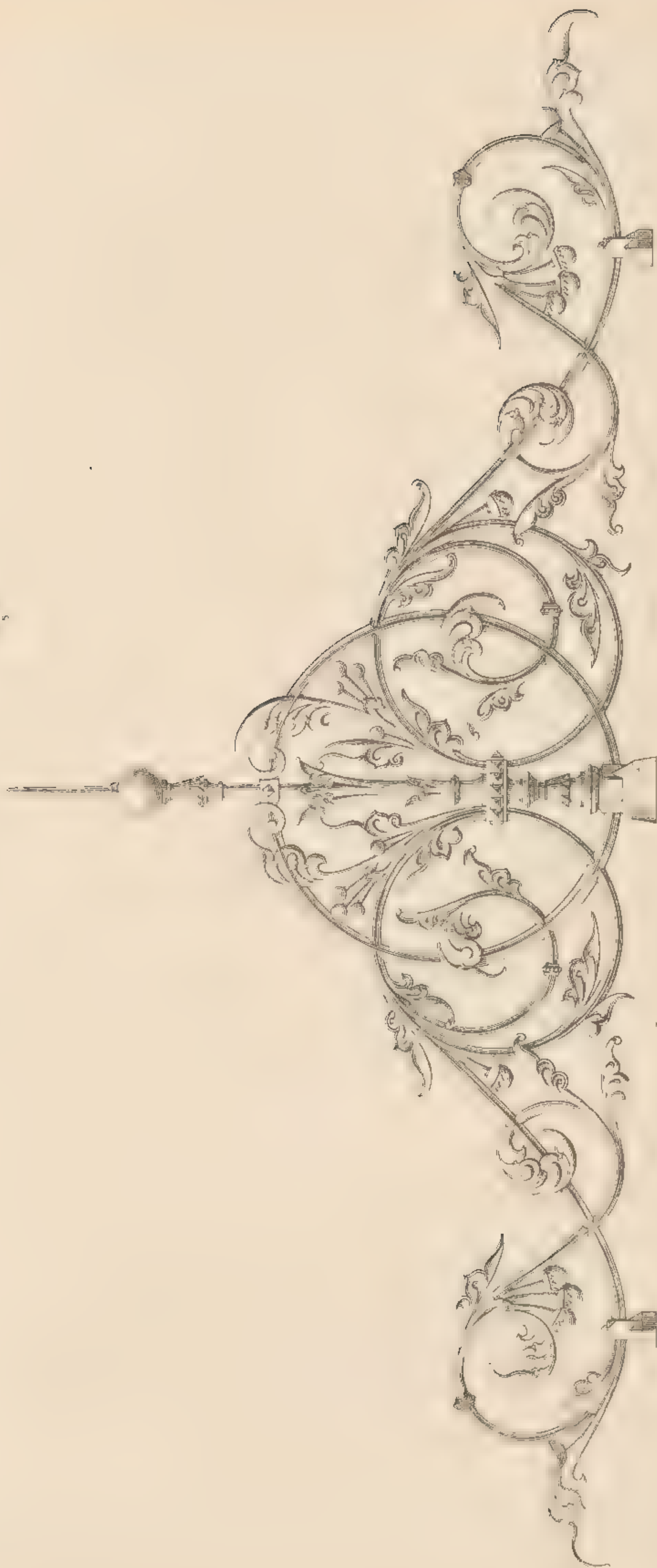


These can be supplied with either one or four sides, for Wedge or Mansard Roofs also other sizes to order.

SCALE | INCH — | FOOT

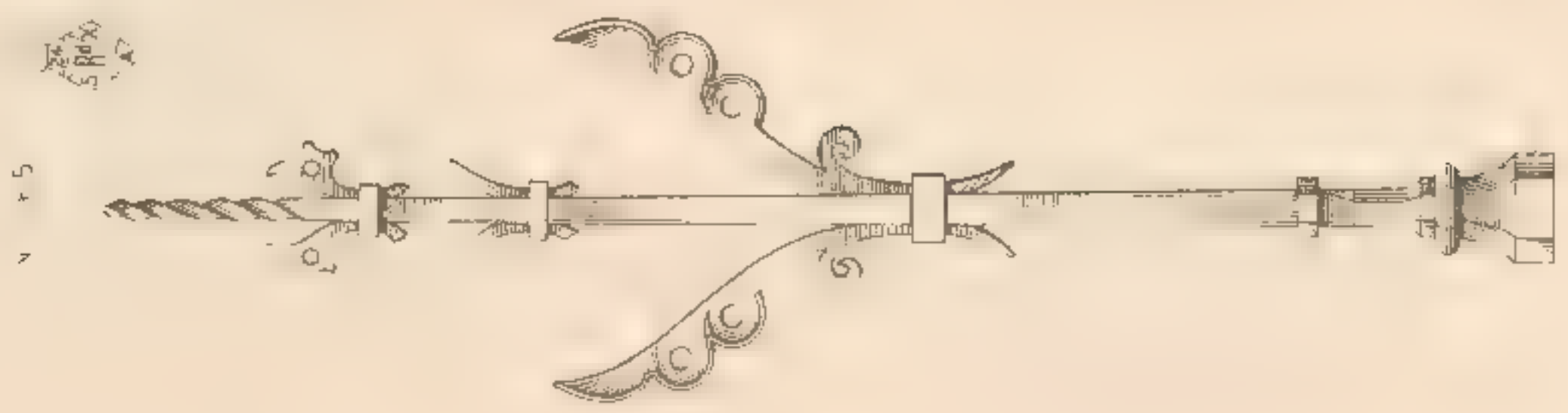
4

10
A.P.
5

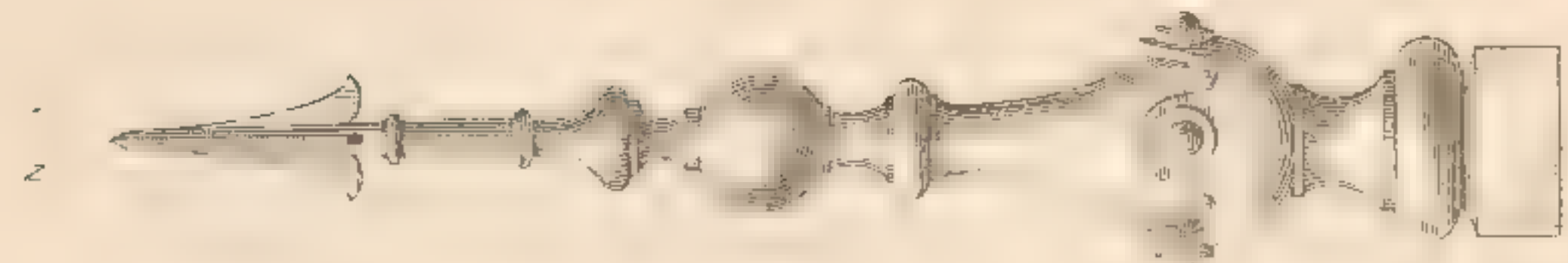


SCALE INCH = 1 FOOT

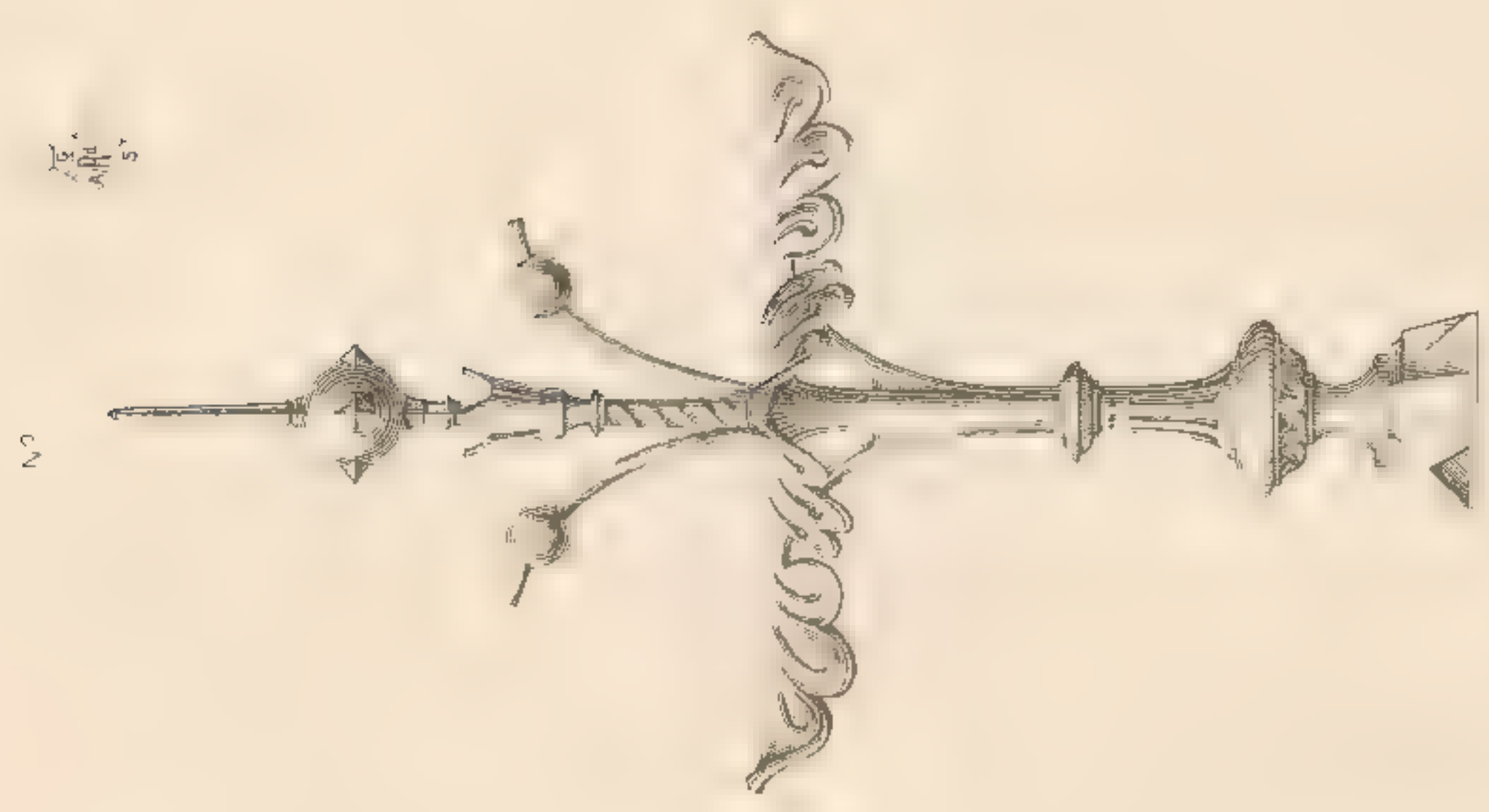
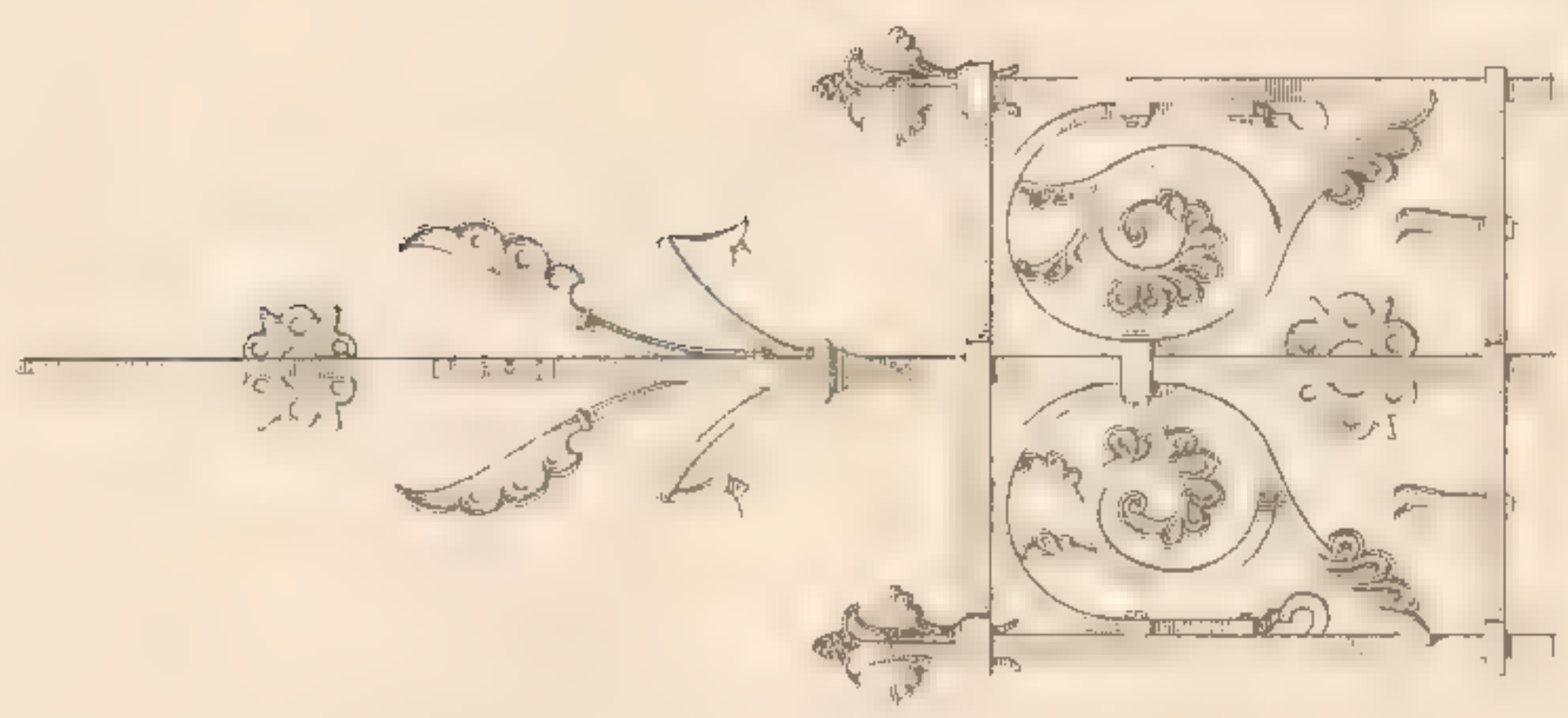
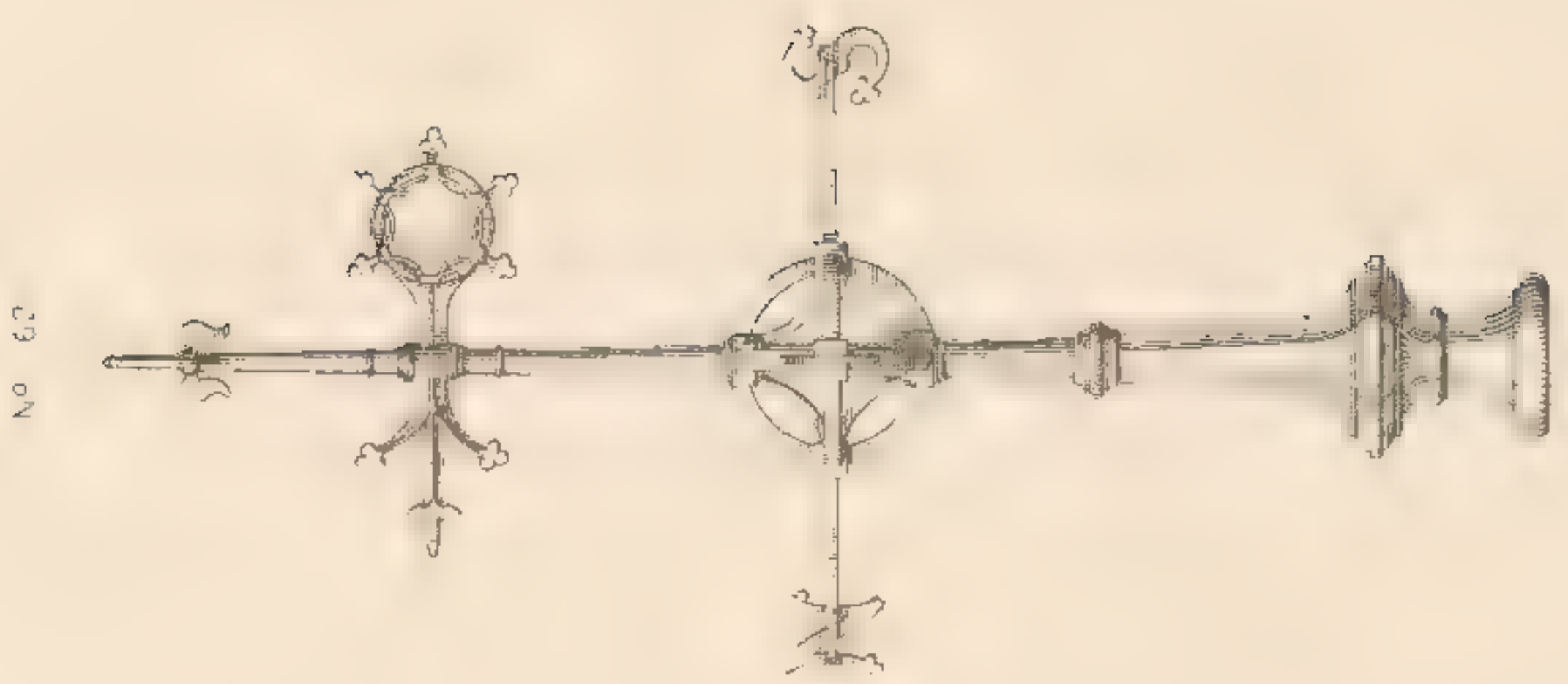
MACFARLANE'S TERMINALS & C



ARMS 2 AND 4 WAYS

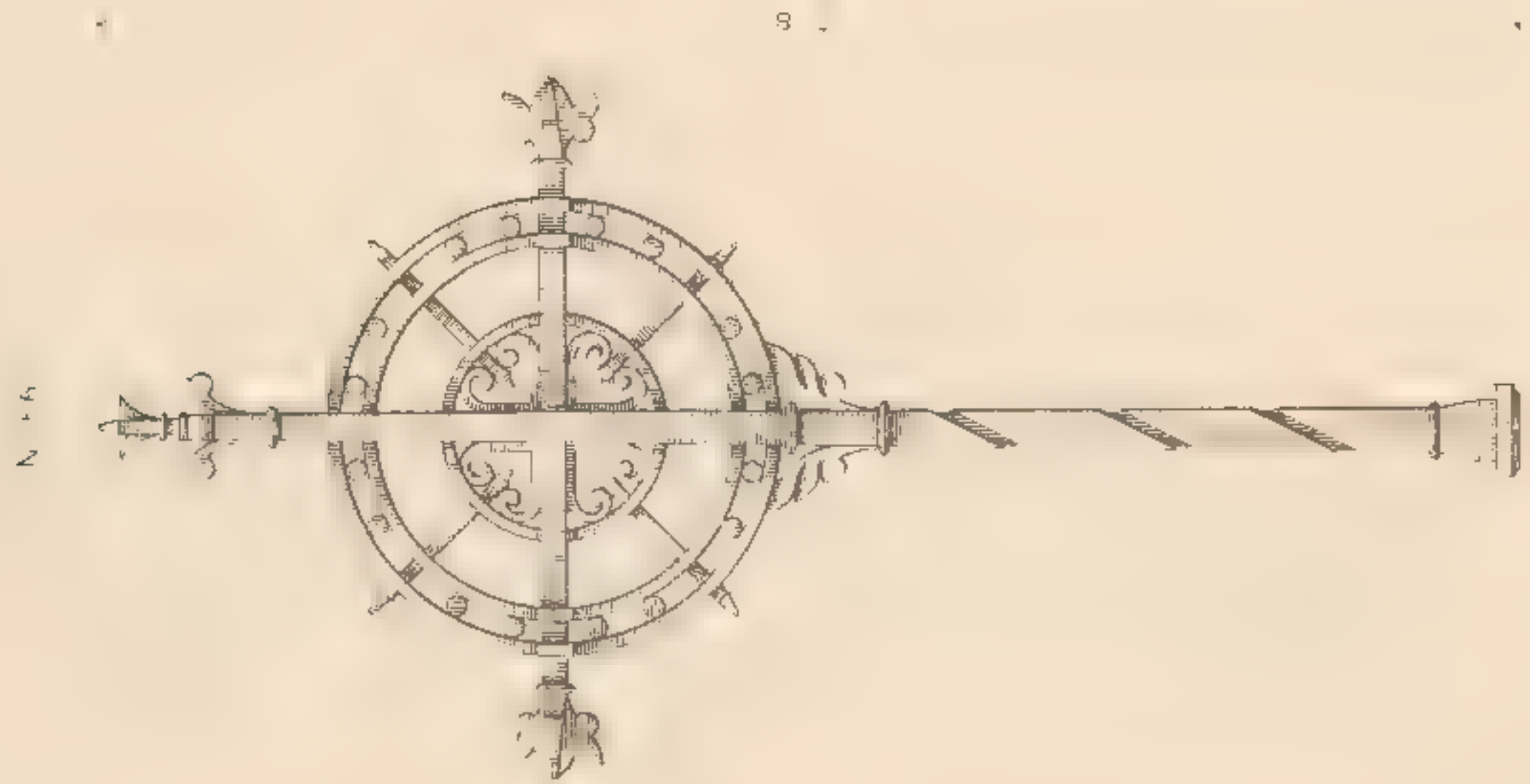
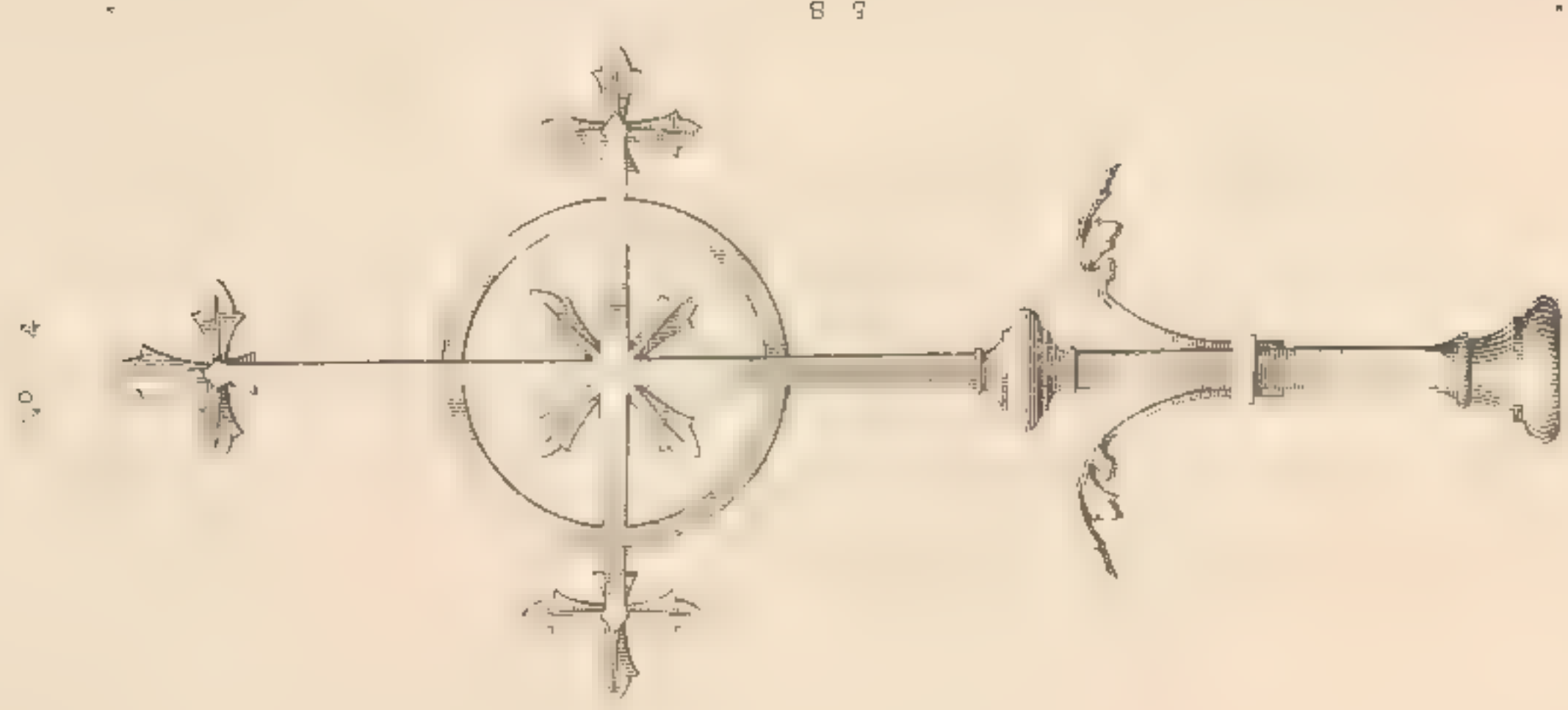


DESIGNS, TERMINALS &c



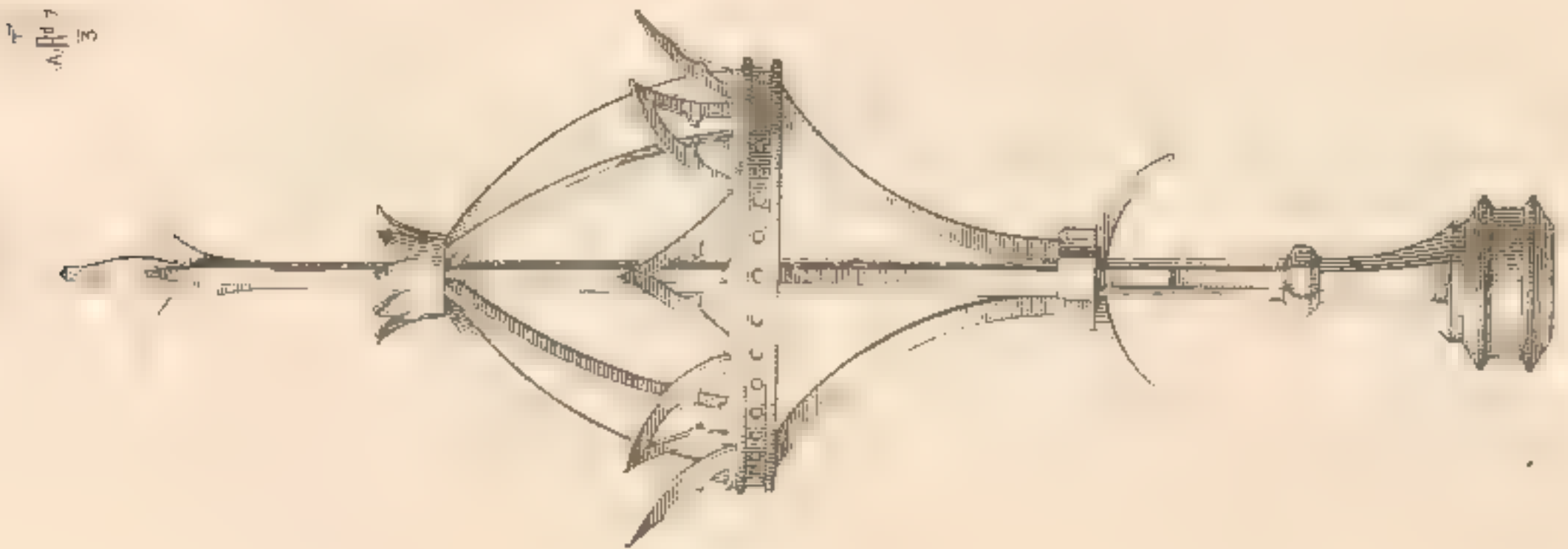
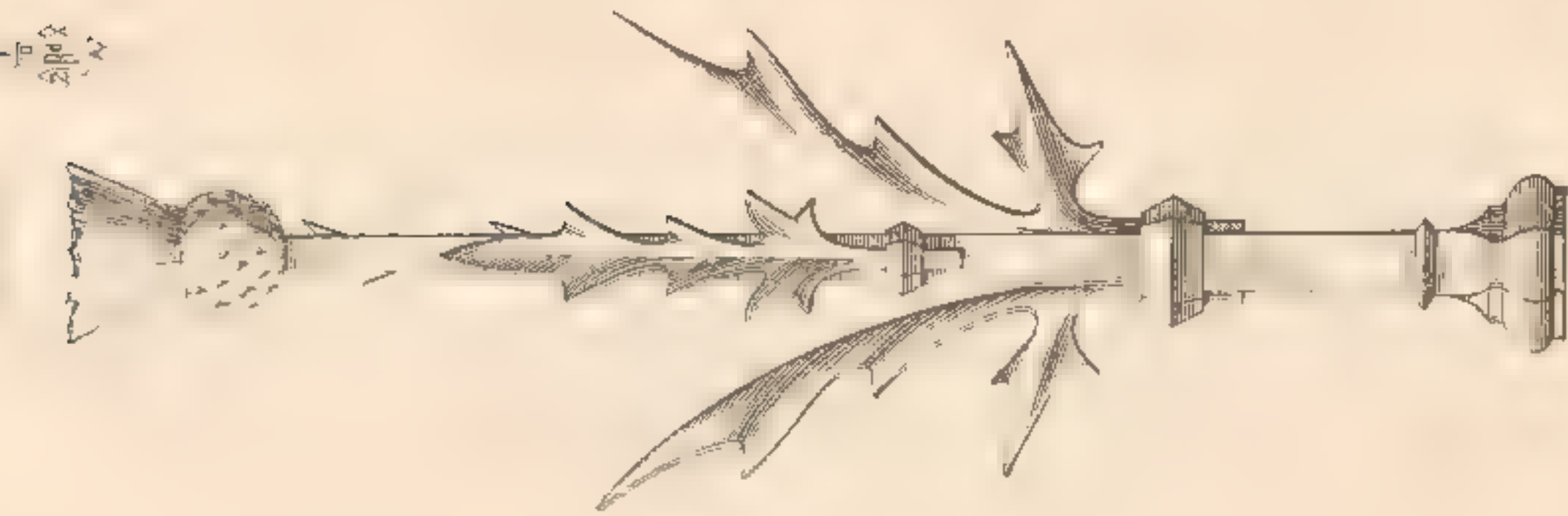
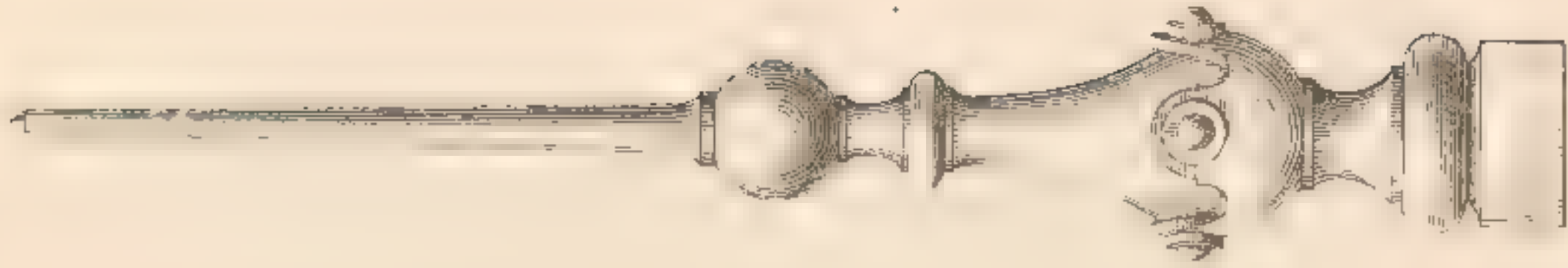
SCALE INCH = 1 FOOT

MACFARLANE'S TERMINALS & C



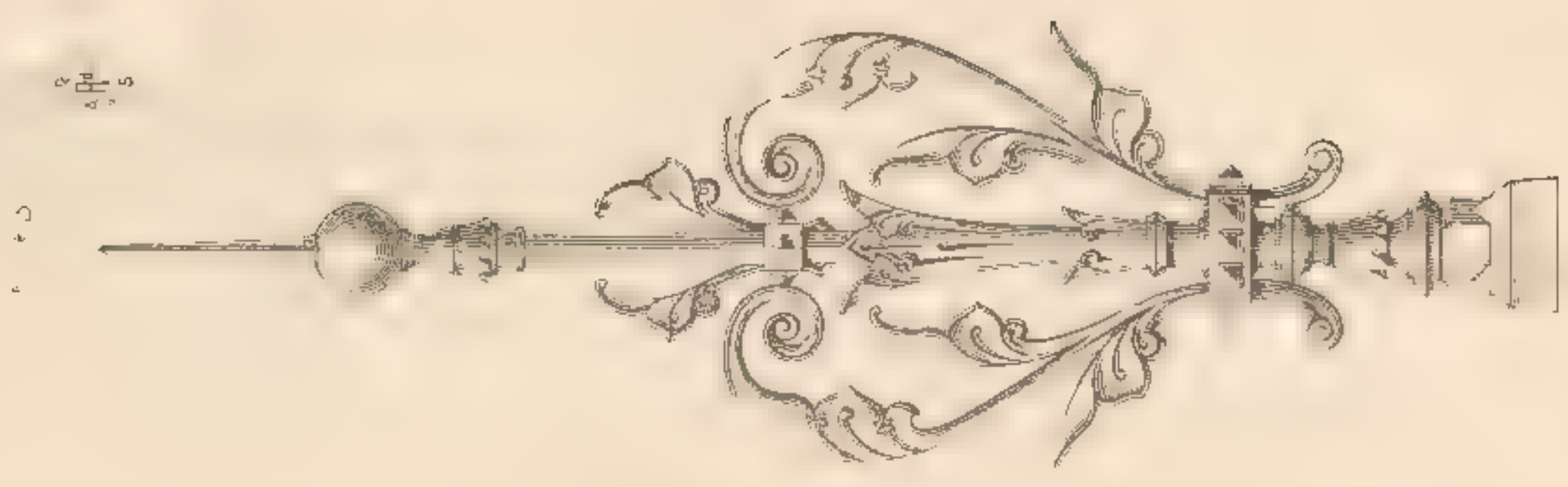
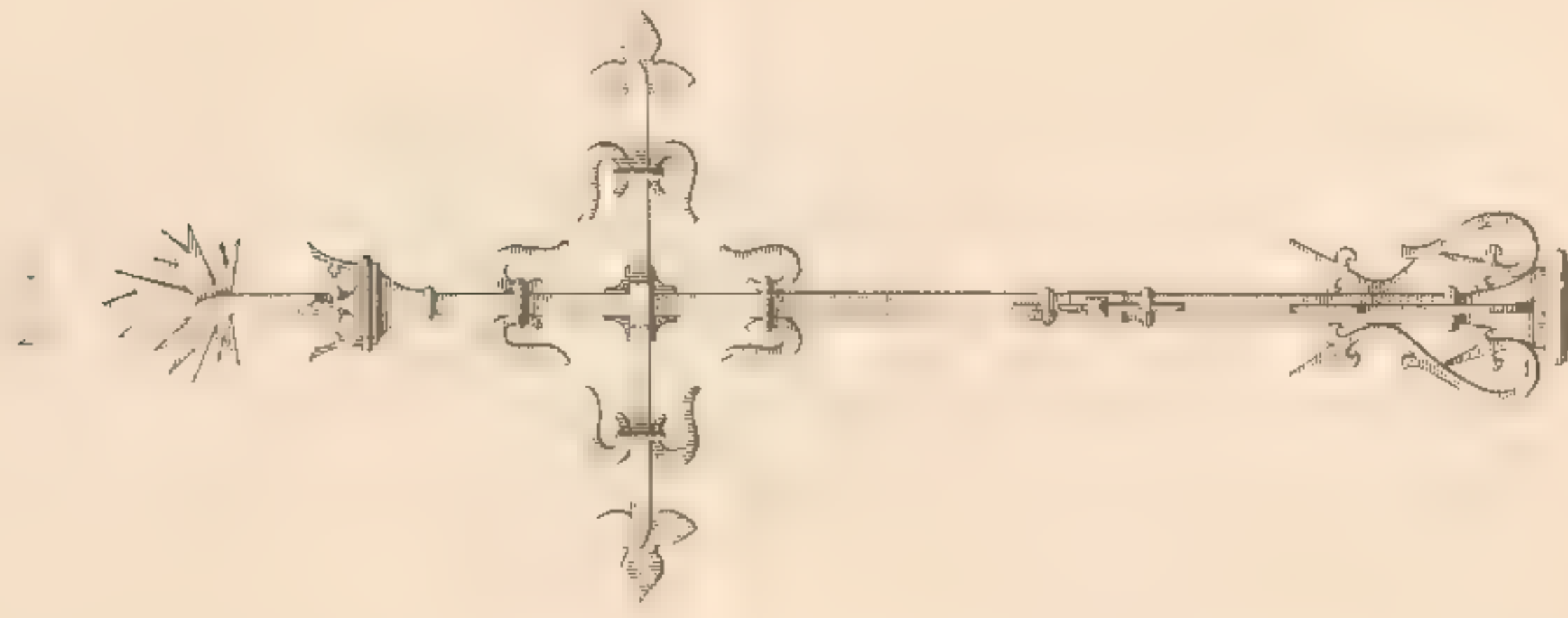
SCALE 1 INCH FOOT

CHAR. A. LES TERM NALS 30



SCALE INCH = FOOT

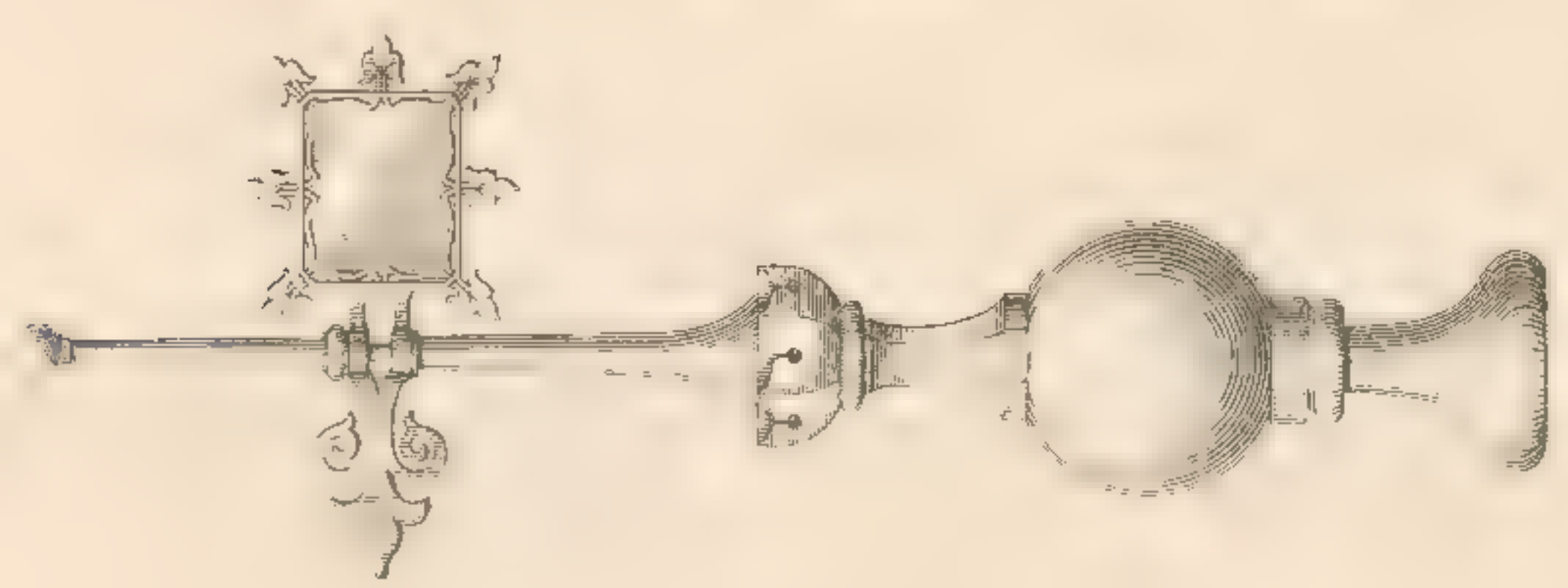
MACFARLANE'S TERMINALS & C



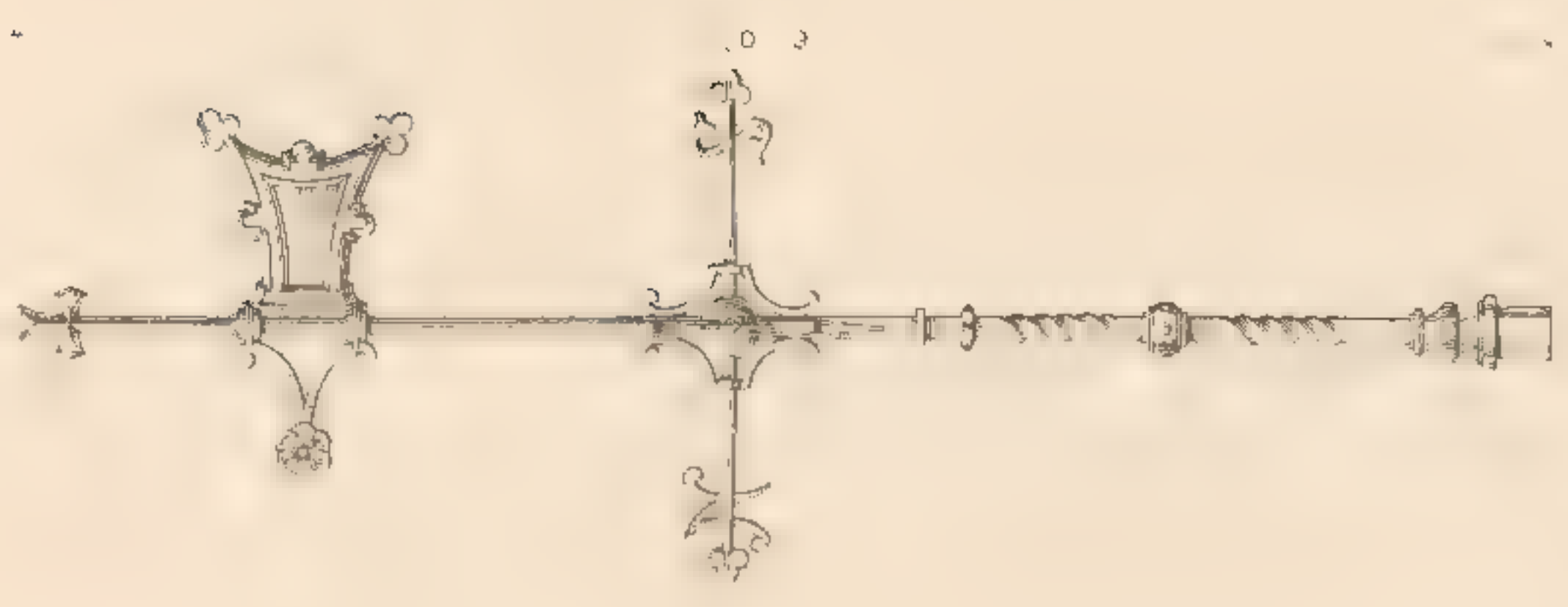
SCALE 1 INCH = 1 FOOT

MACFARLANE'S TERMINALS &c

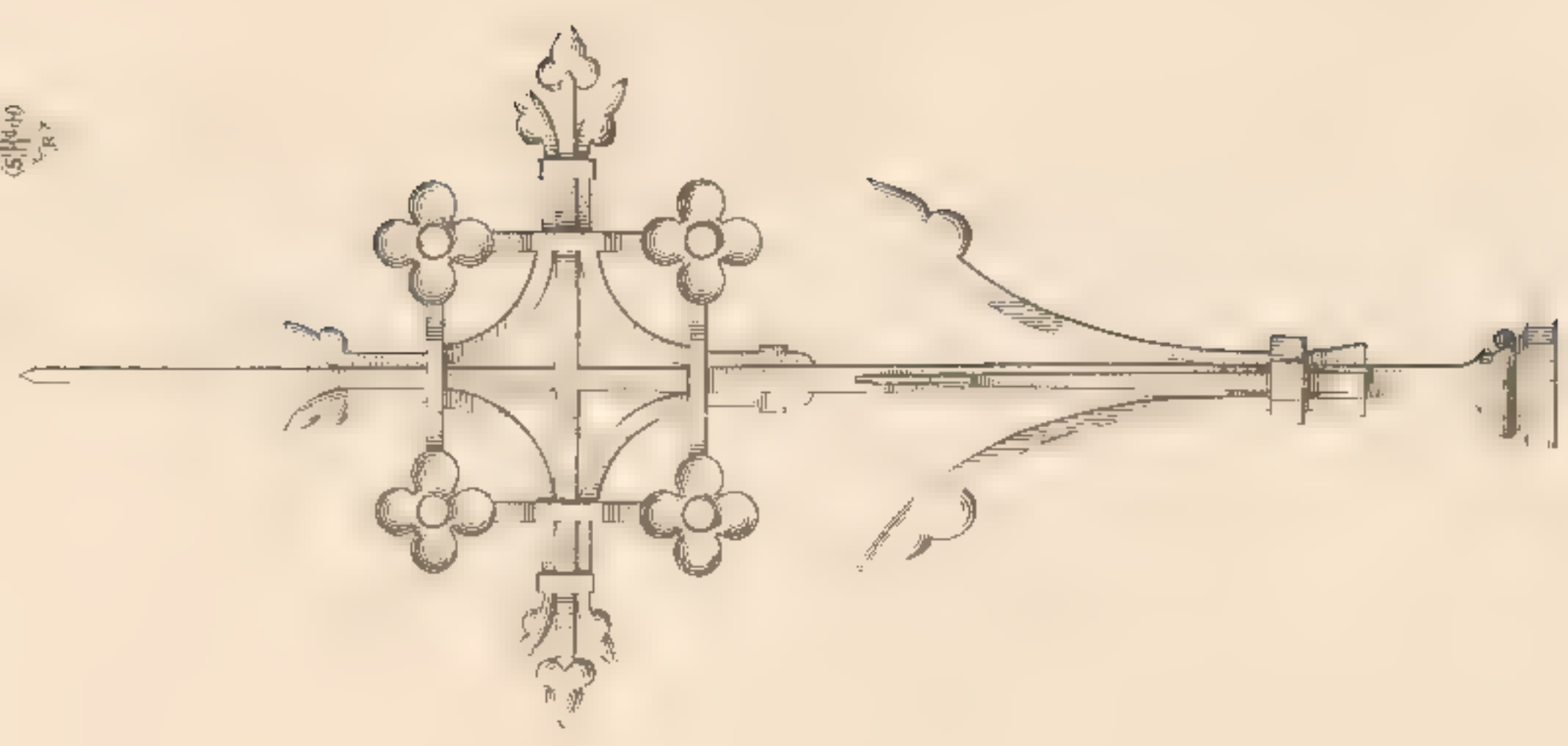
Nº 64.



Nº 124

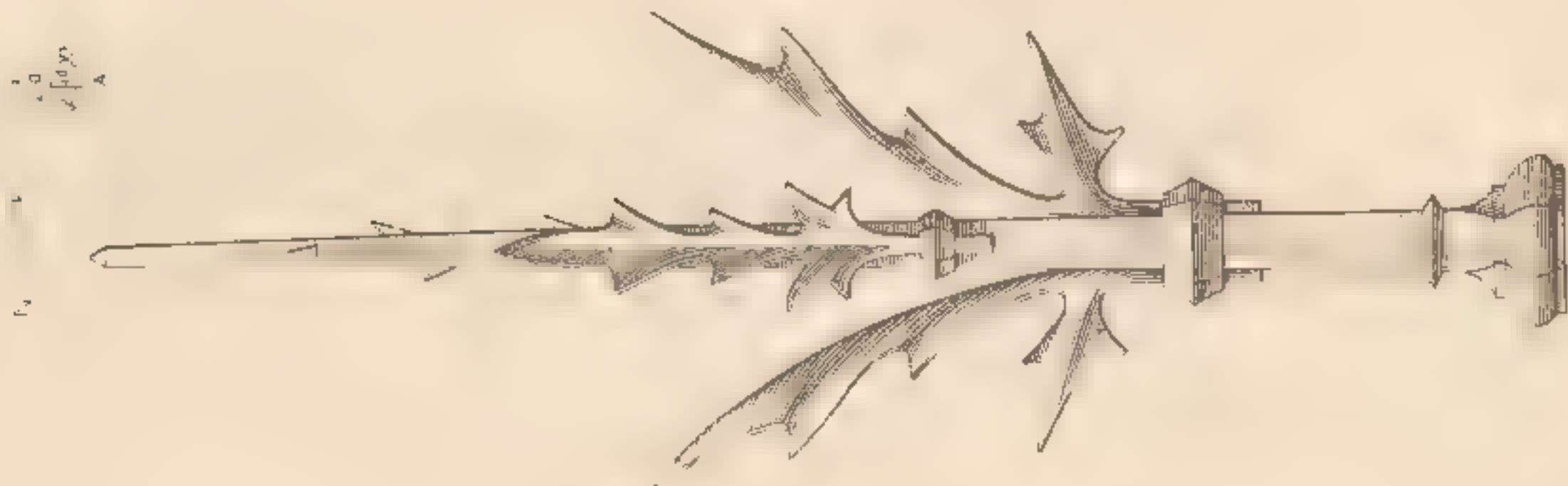
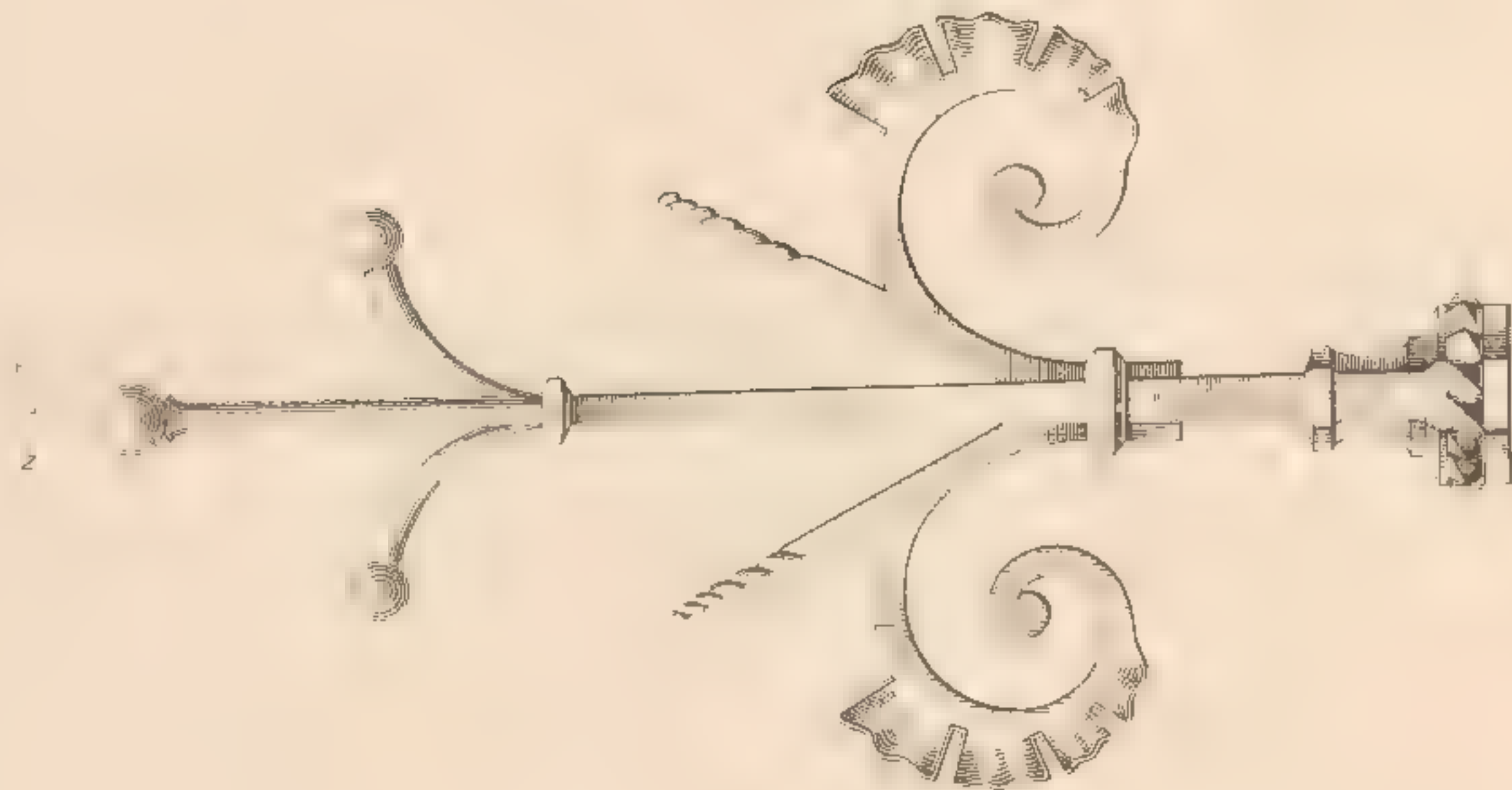
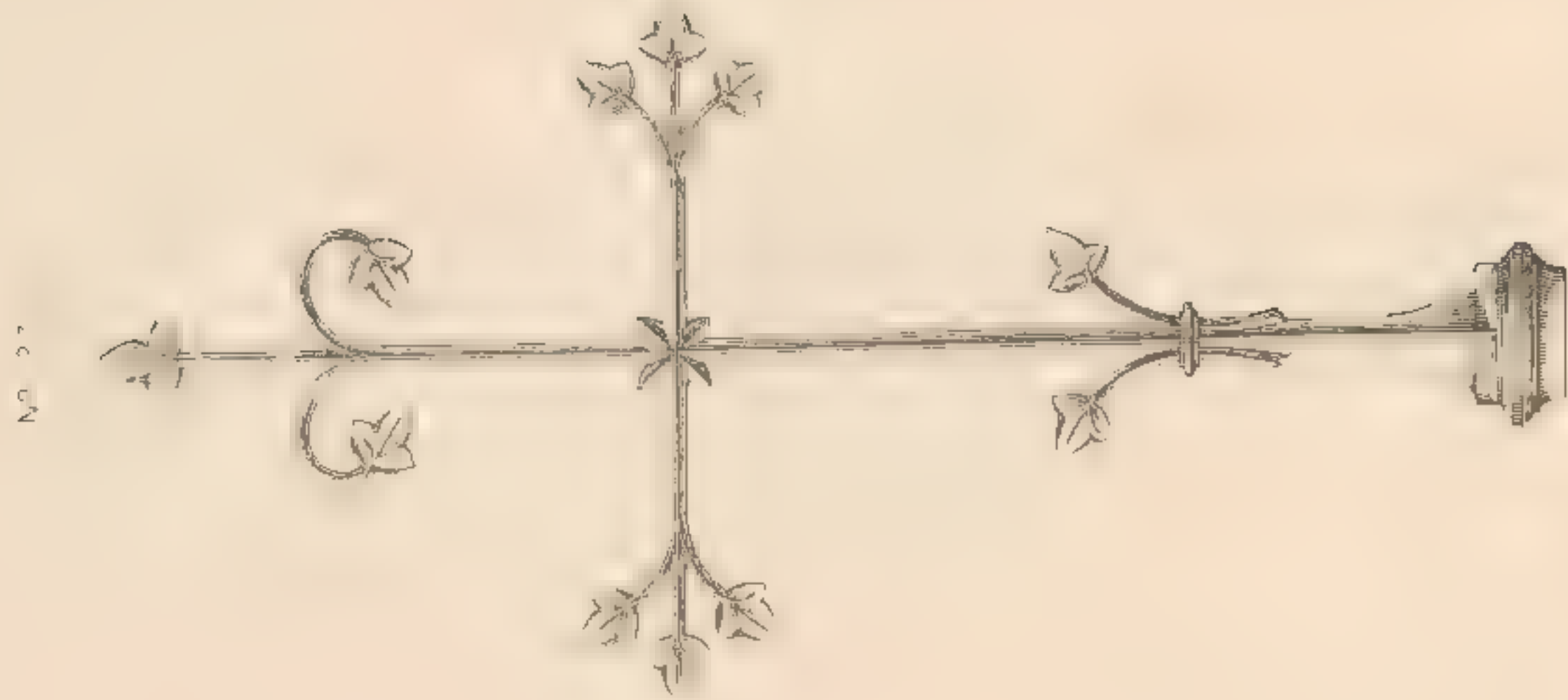


Nº 34



SCALE 1 INCH = FOOT

MACFARLANE'S TERMINALS &c



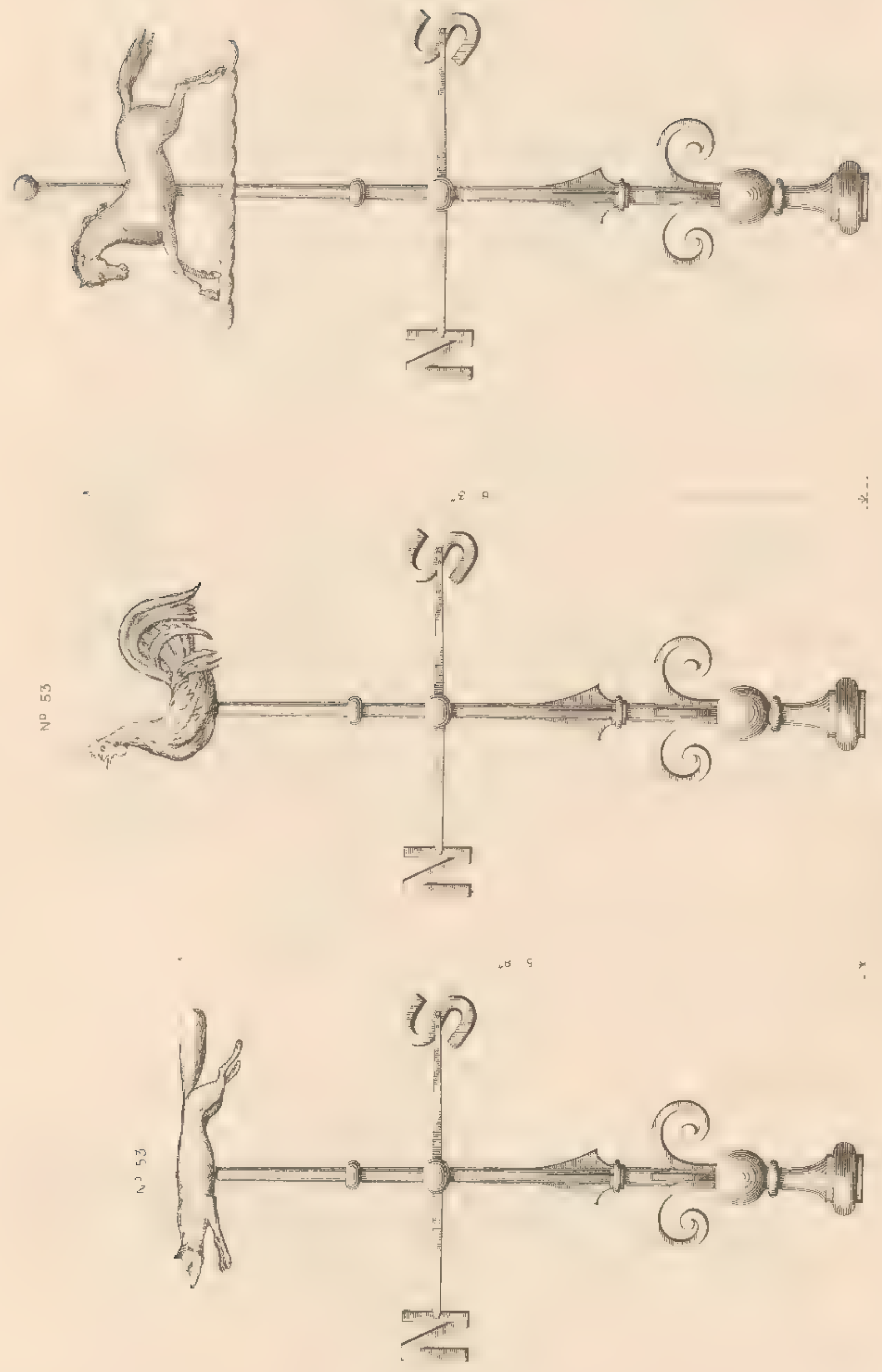
ARMS 2 AND 4 WAYS

SCALE 1 INCH

MACFARLANE'S TERMINALS &c

Nº 53

Nº 53



The Fox, Cock, or Horse can be attached to any other stalk. Also other devices to order.

SCALE 1 INCH = 1 FOOT

MACFARLANE'S TERMINALS &c

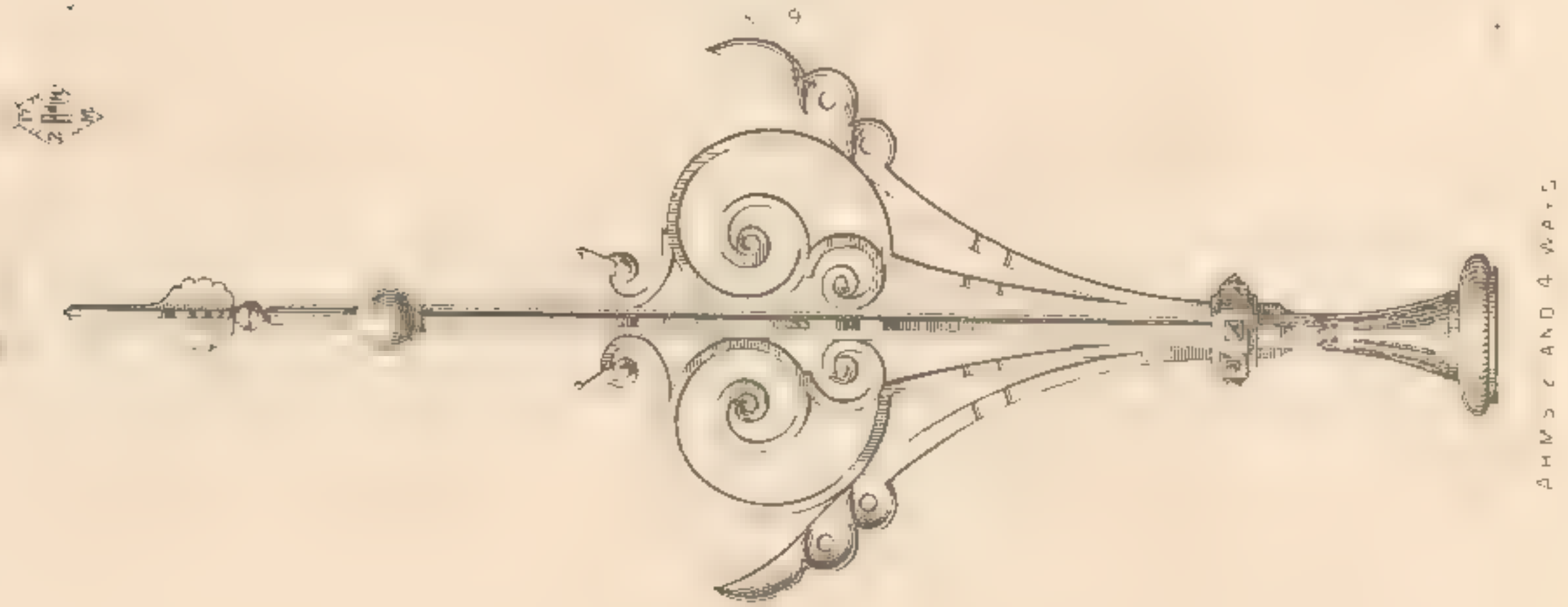
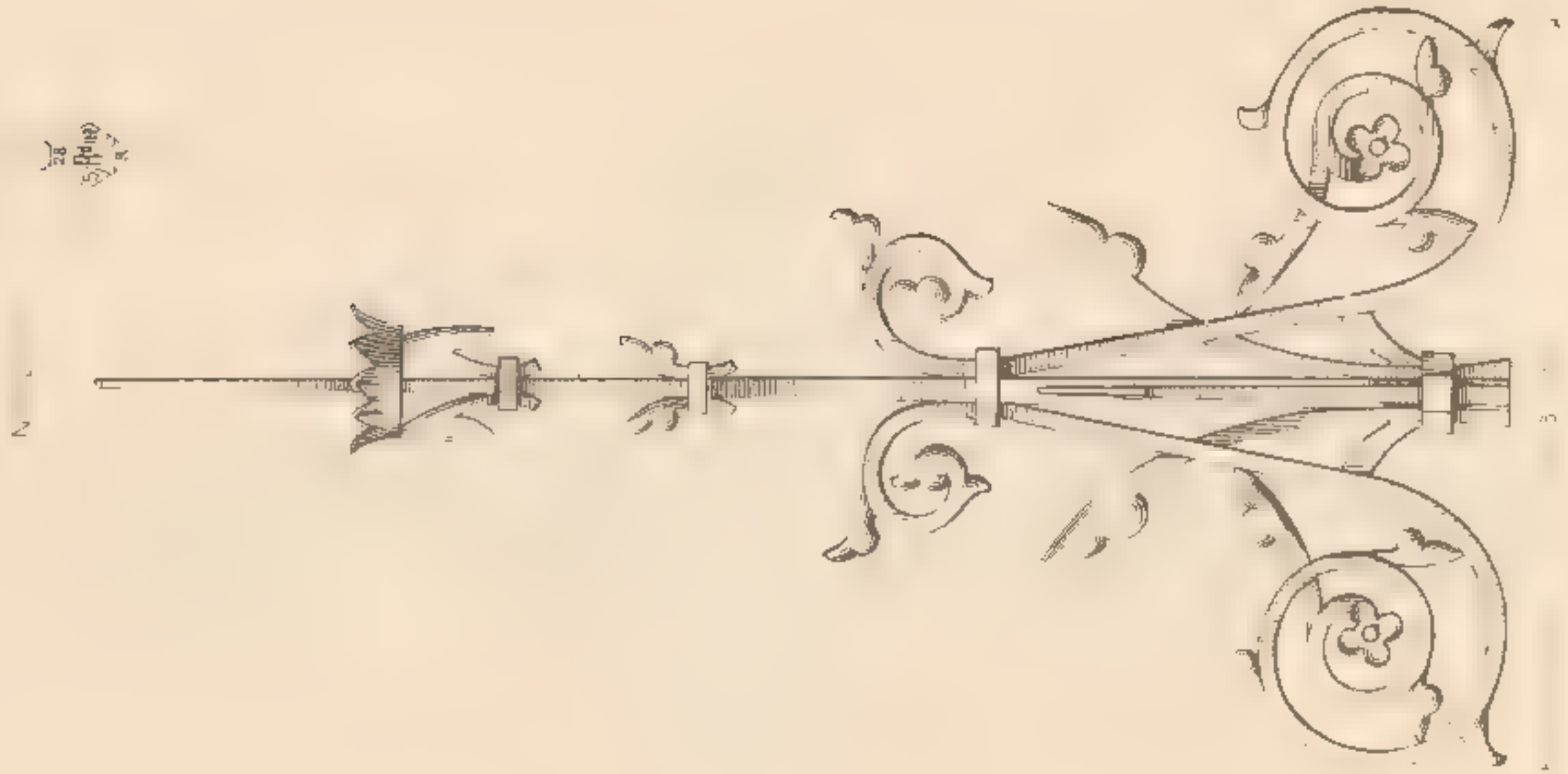
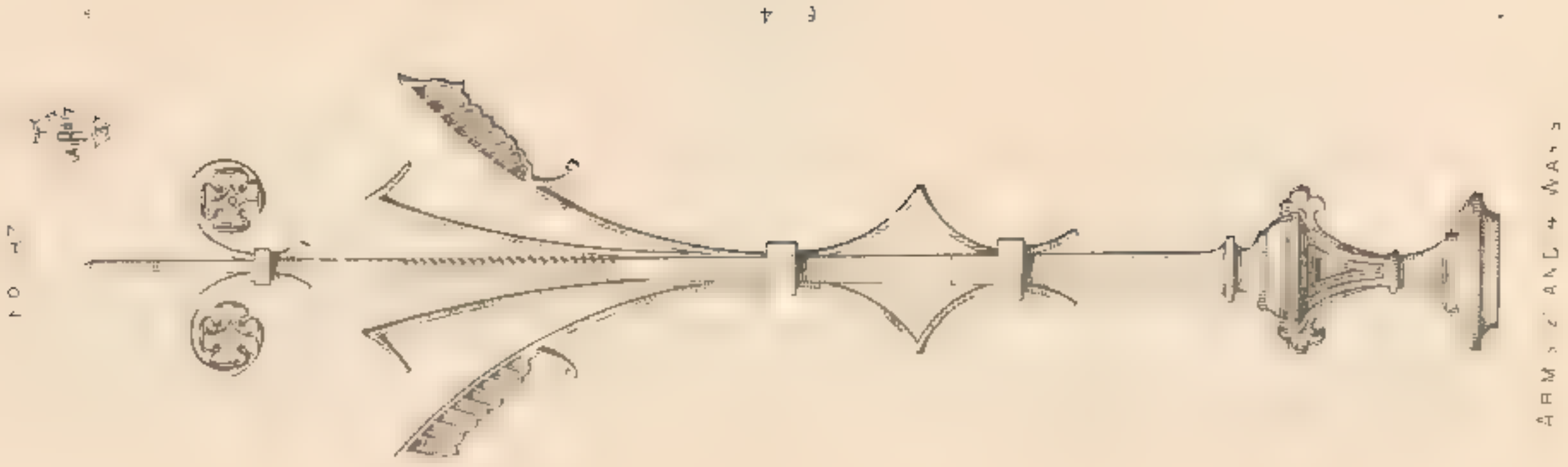


PLATE I

No 59

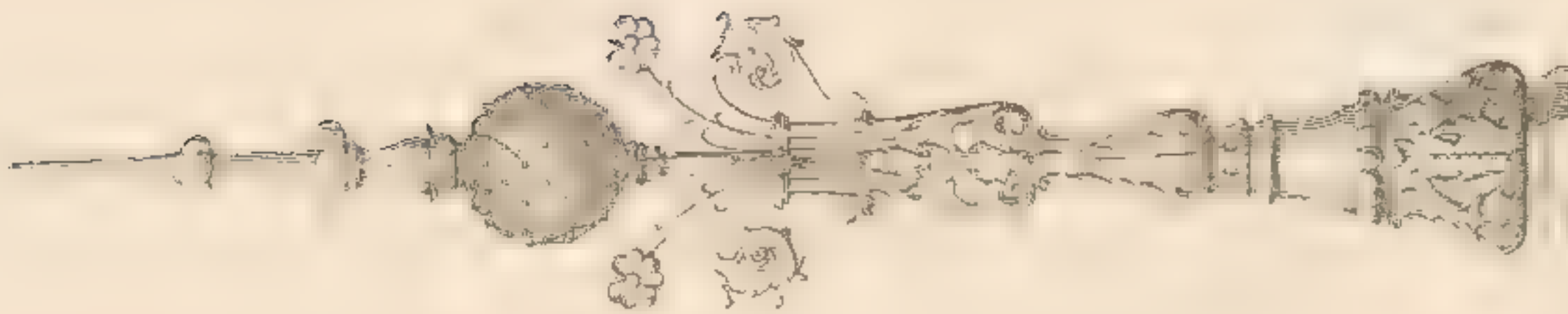
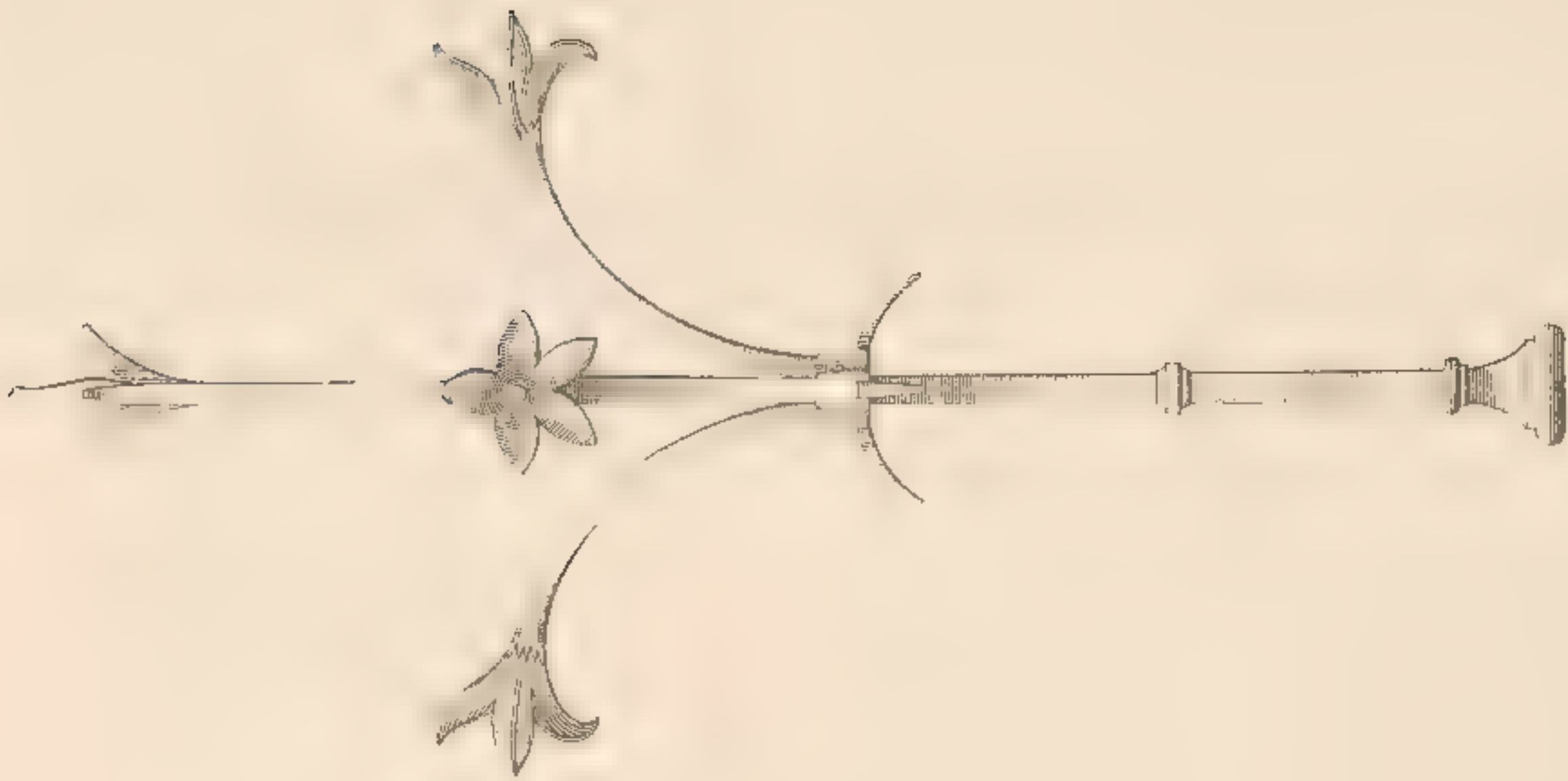
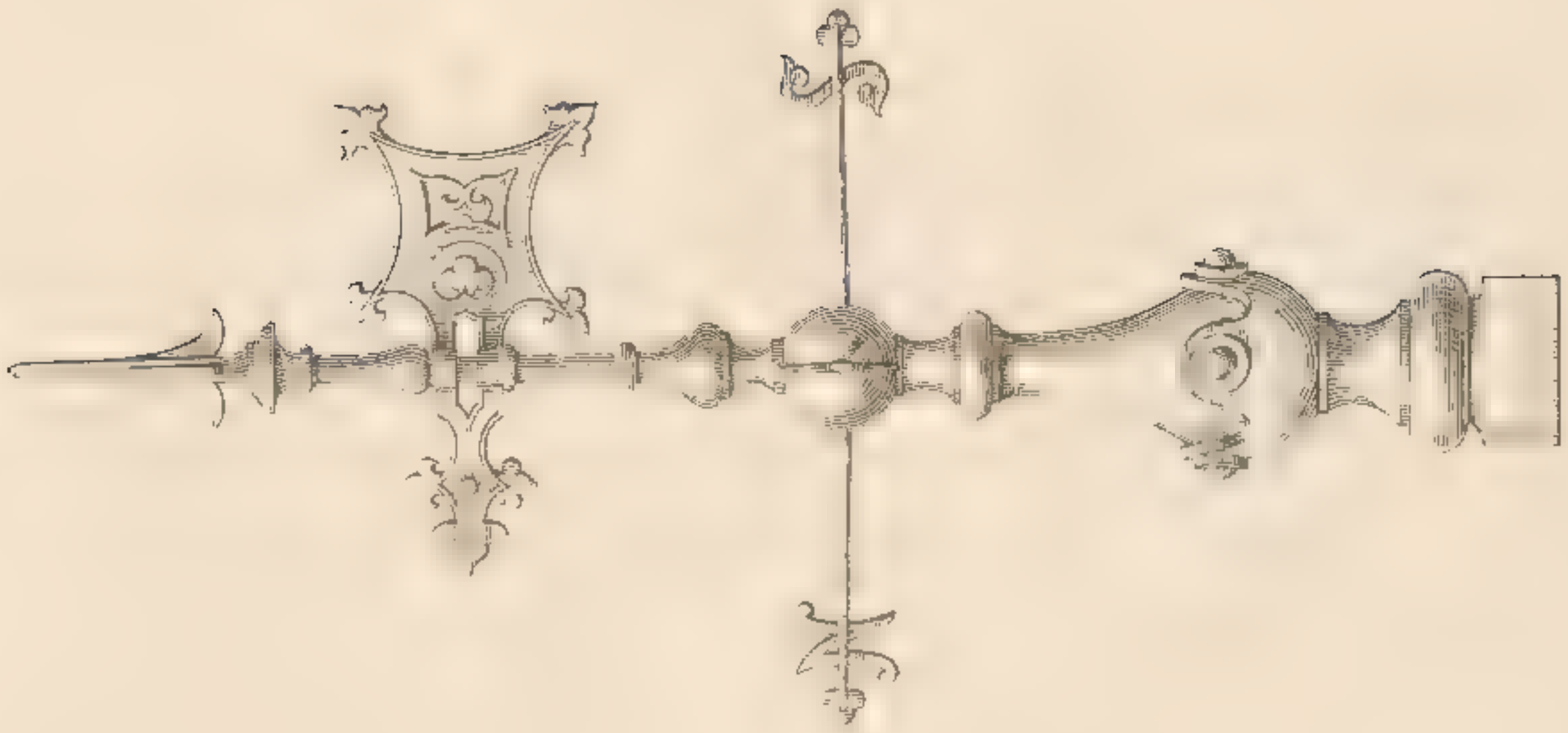


PLATE I

Nº 227

0 1



6 6



4 1 A

SECTION

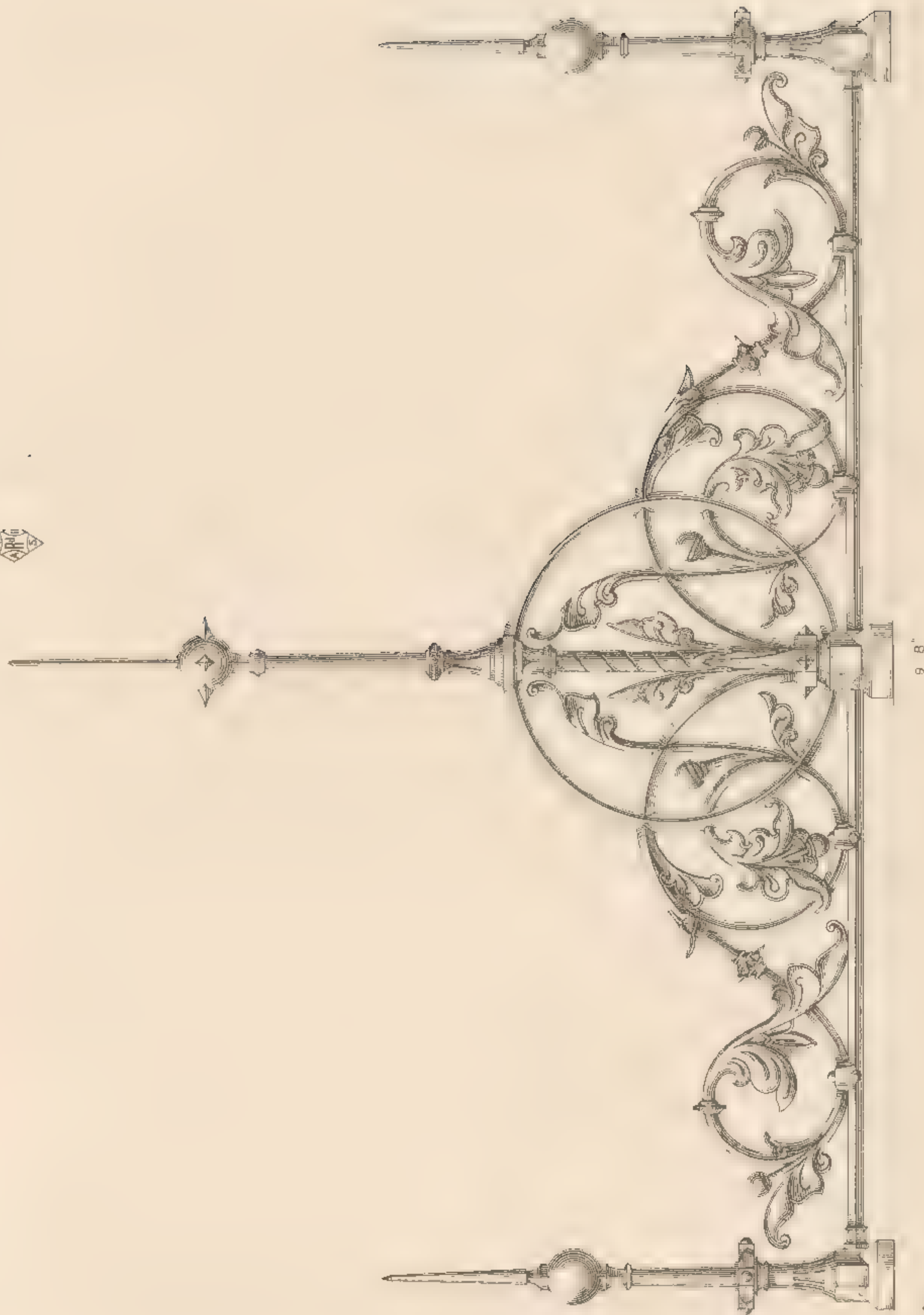
Diameter inside of
Flange A 6 ft. 6 ins.
other sizes to order



SCALE 1 INCH = 1 FOOT

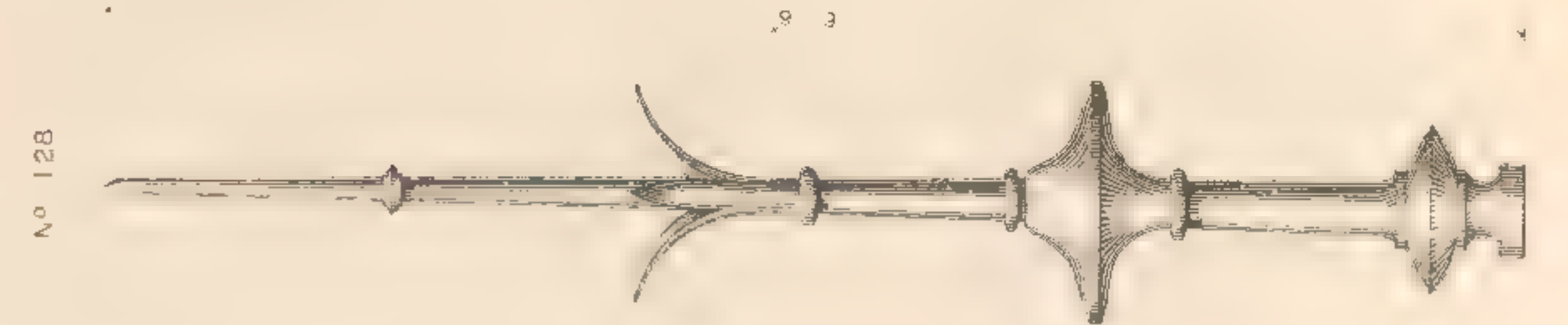
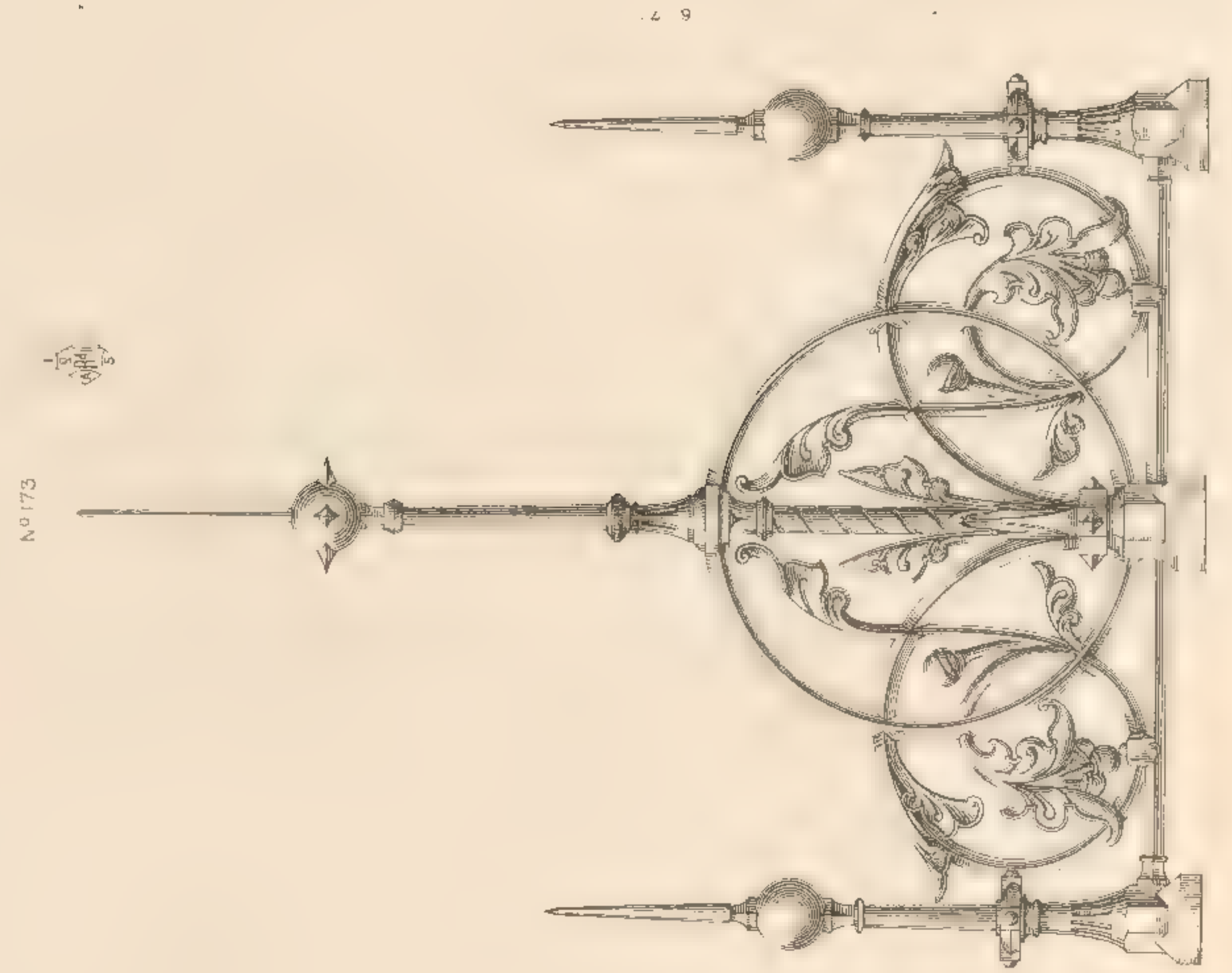
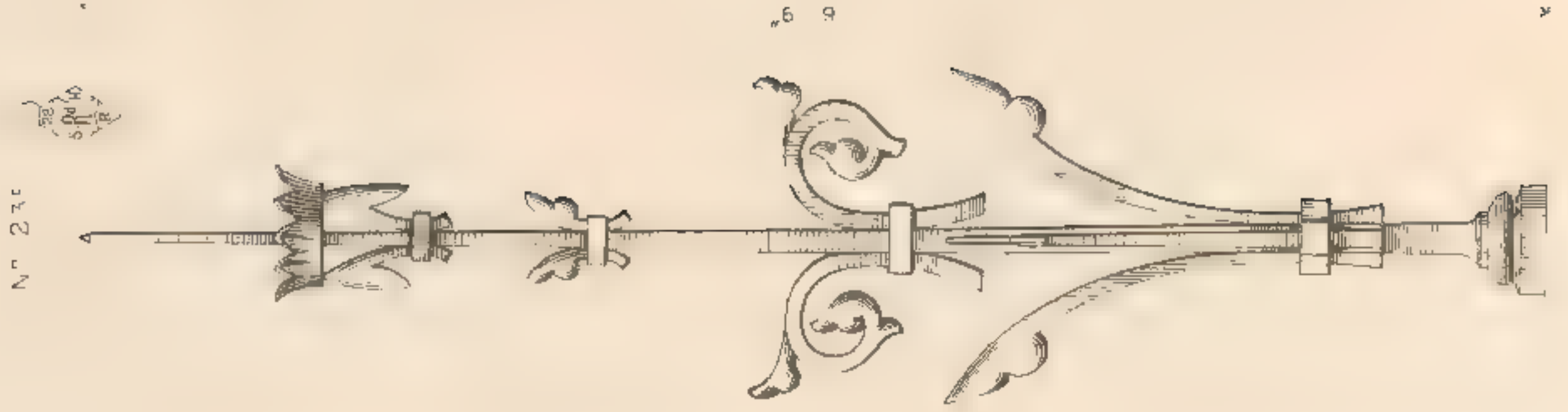
MACFARLANE'S TERMINALS & C.

No 173



SCALE 1 INCH = FOOT

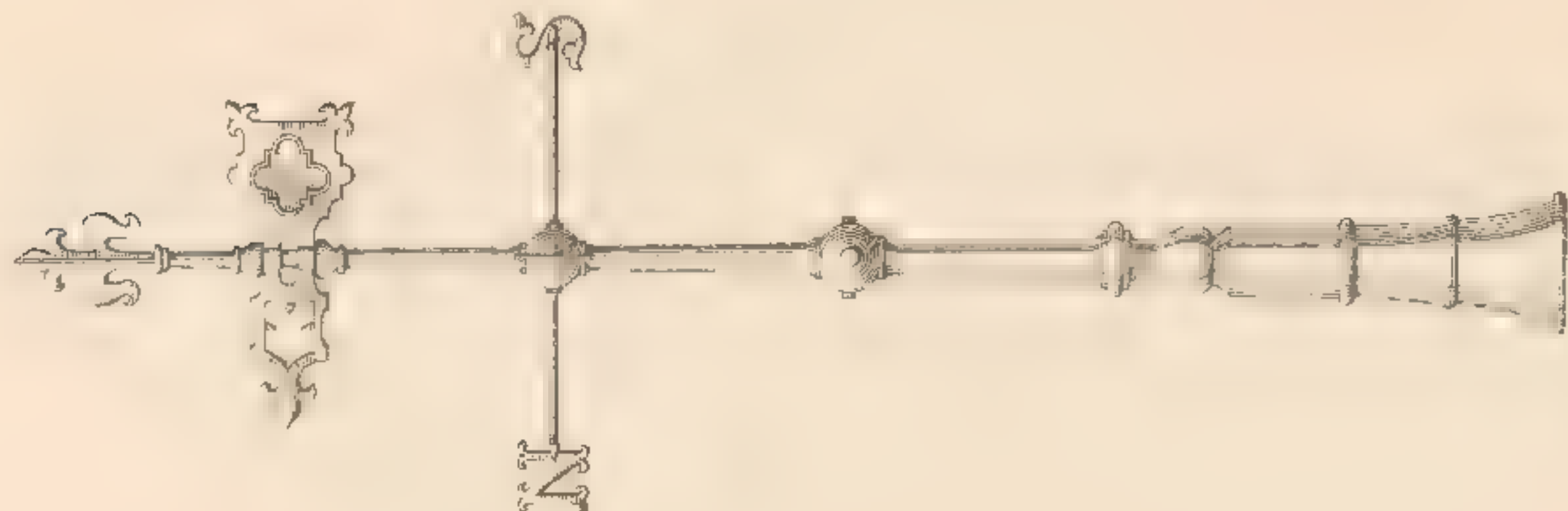
MACFARLANE'S TERMINALS & C



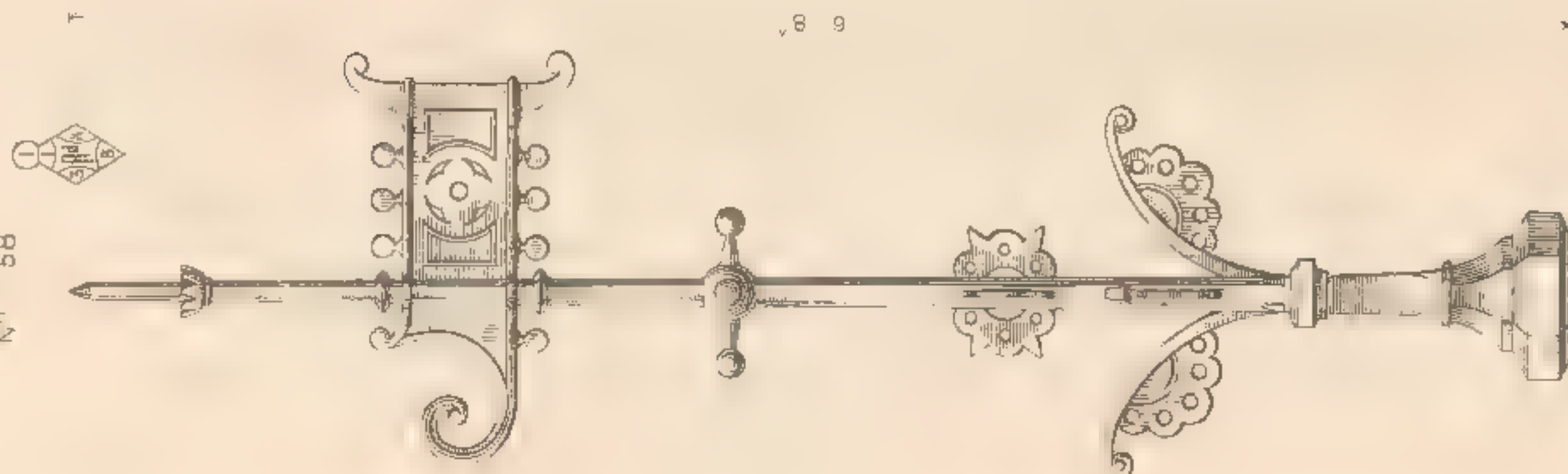
SCALE | INCH = | FOOT

MACFARLANE'S TERMINALS & C

Nº 60.



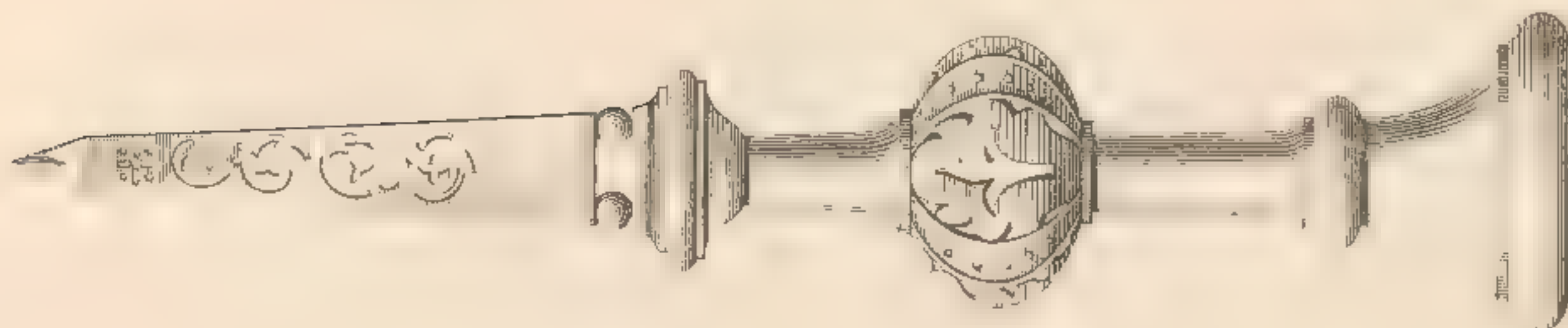
Nº 58



Nº 172



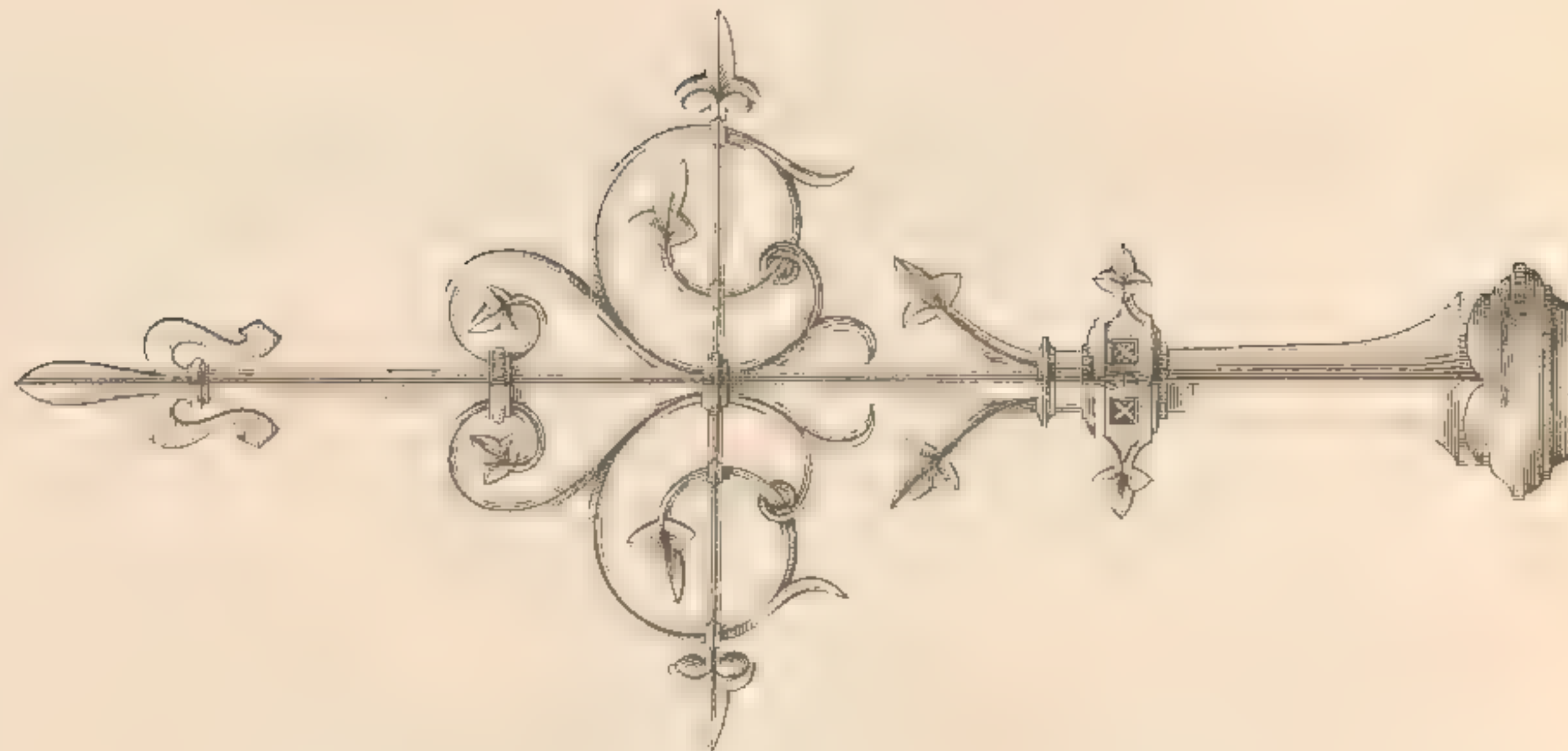
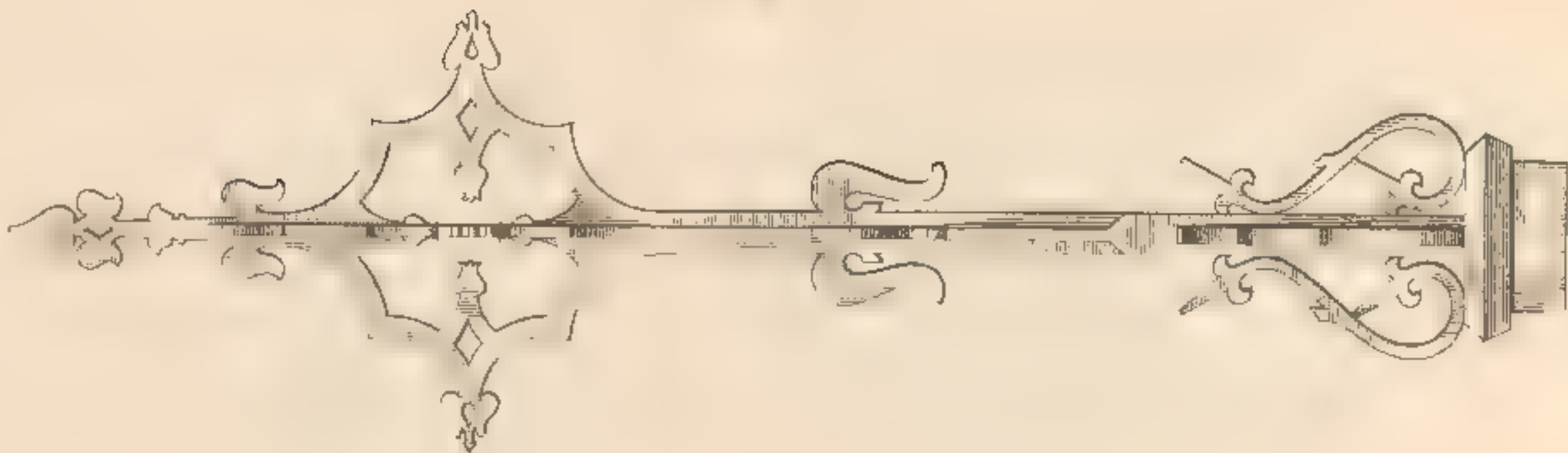
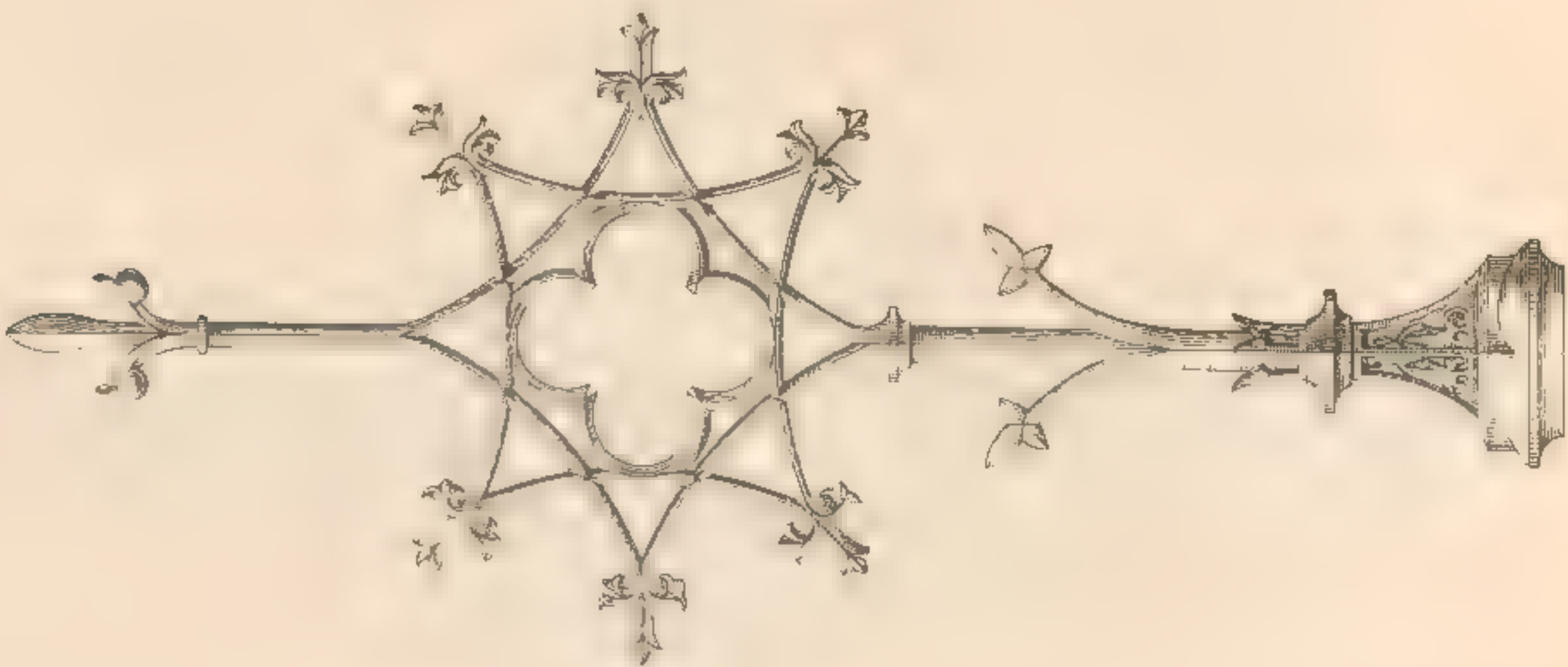
Nº 33



SCALE 1/4 INCH = 1 FOOT

MACFARLANE'S TERMINALS & C

No 2

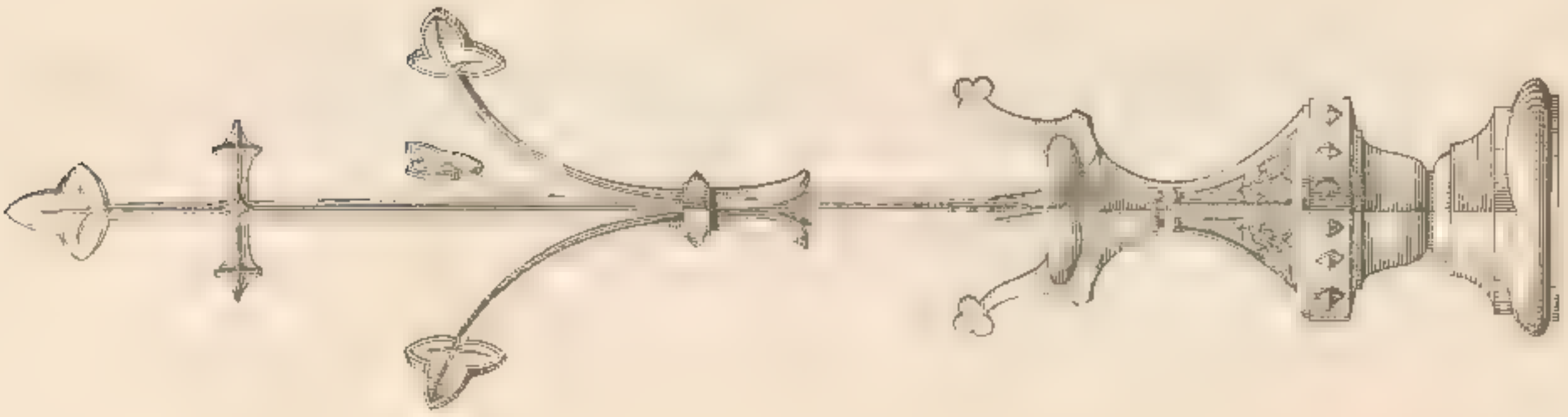


ARMS 2 AND 4 WA 5

J A L H FOOT

MACFARLANE'S TERMINALS & C

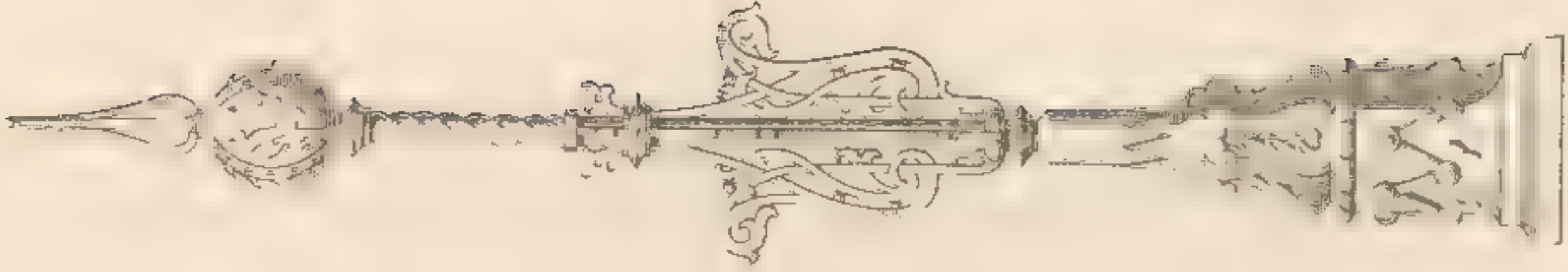
Nº 24



Nº 28



Nº 29

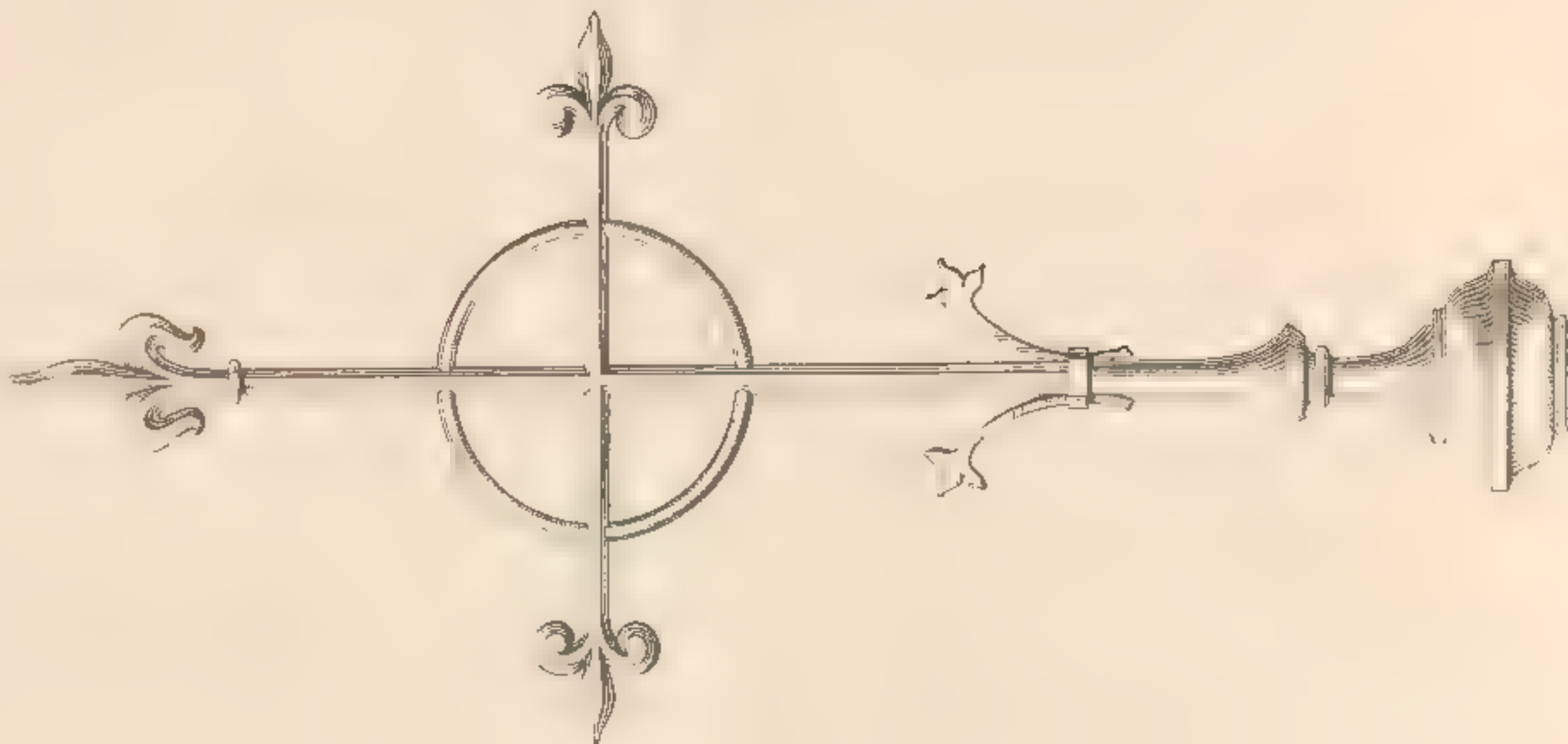
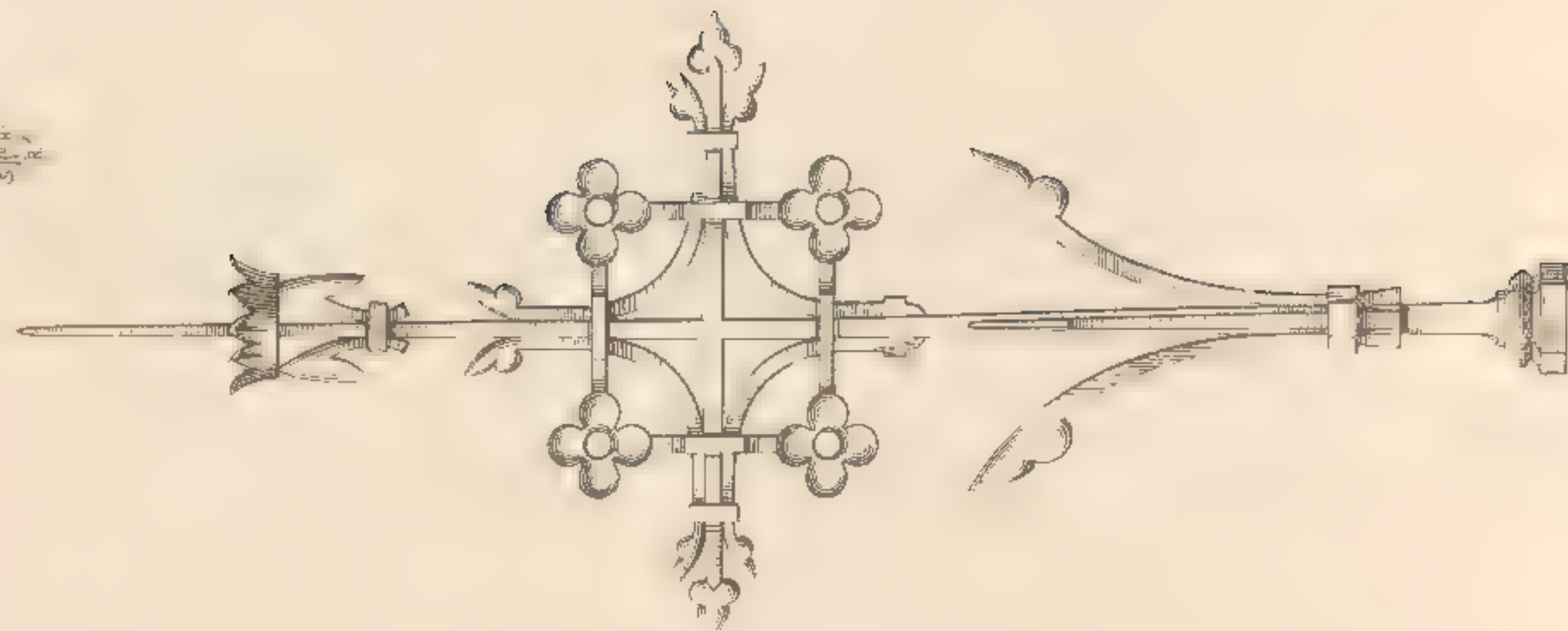


SCALE 1 INCH = 1 FOOT

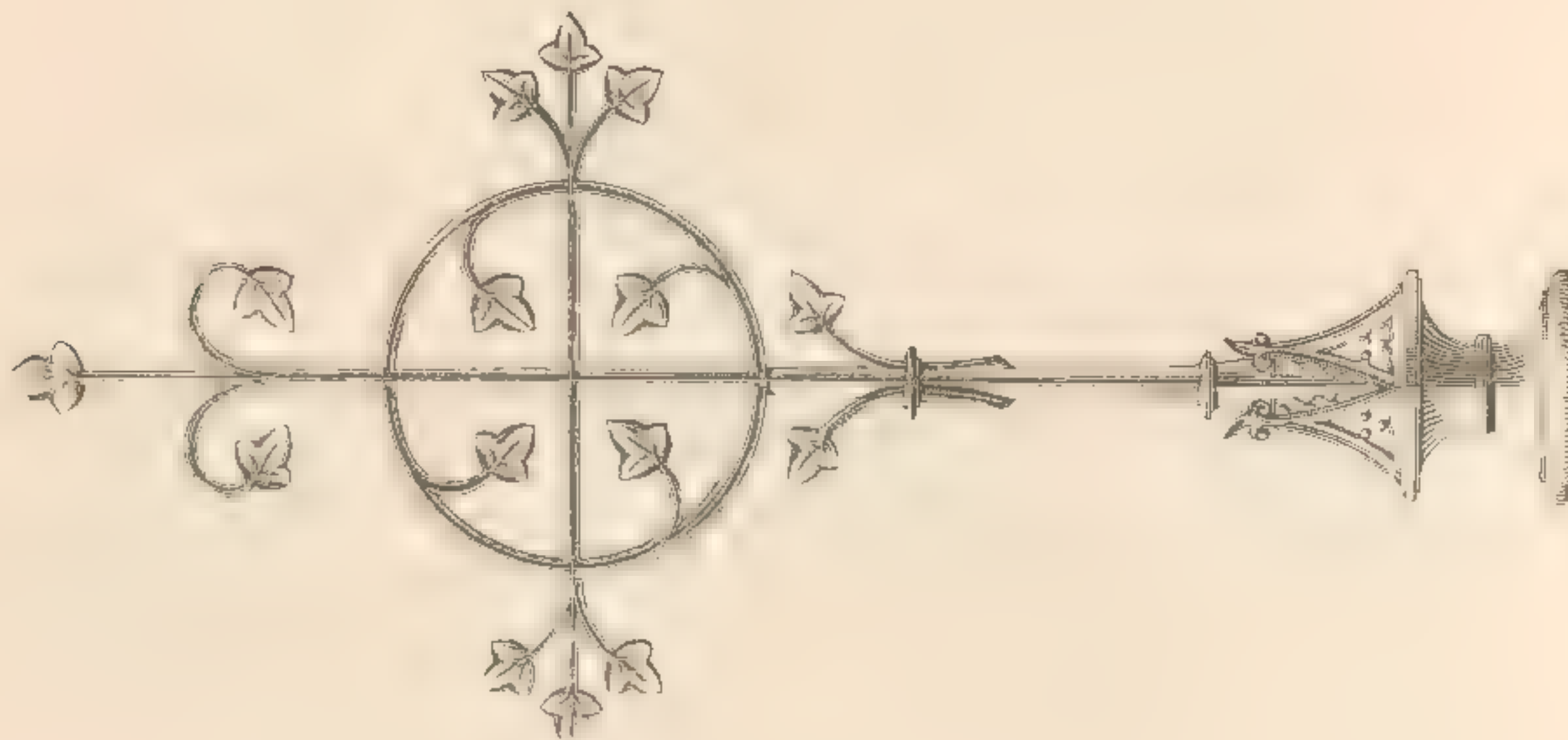
MACFARLANE'S TERMINALS & C

No 44

No 44
 2 1/2
 5 1/2
 1 1/2



No 21

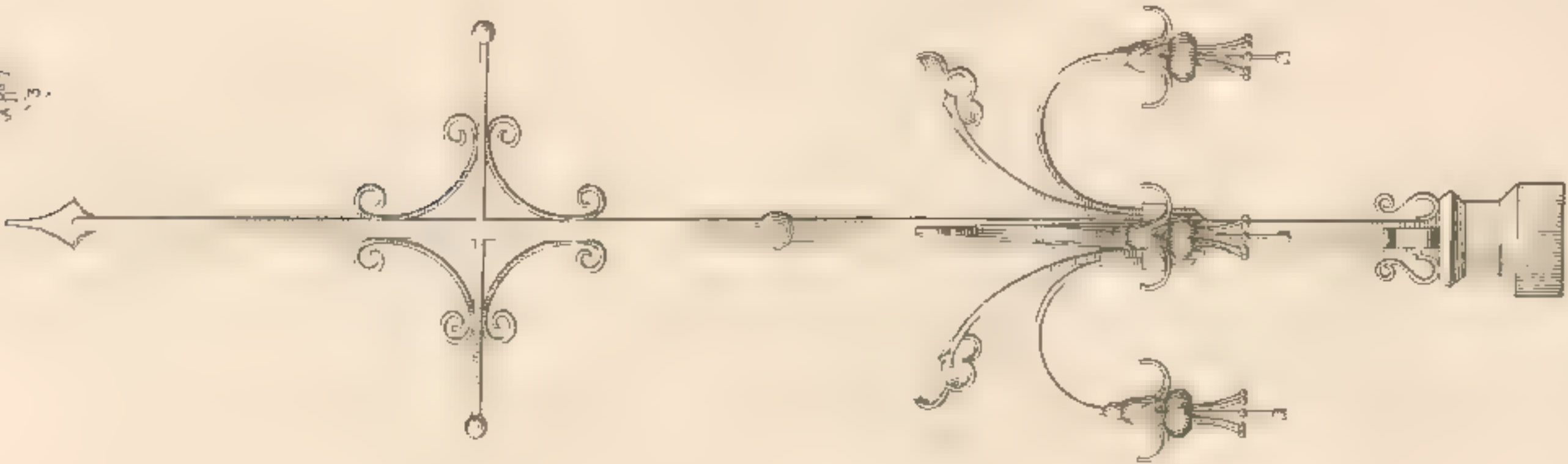


ARMS 2 AND 4 WAYS

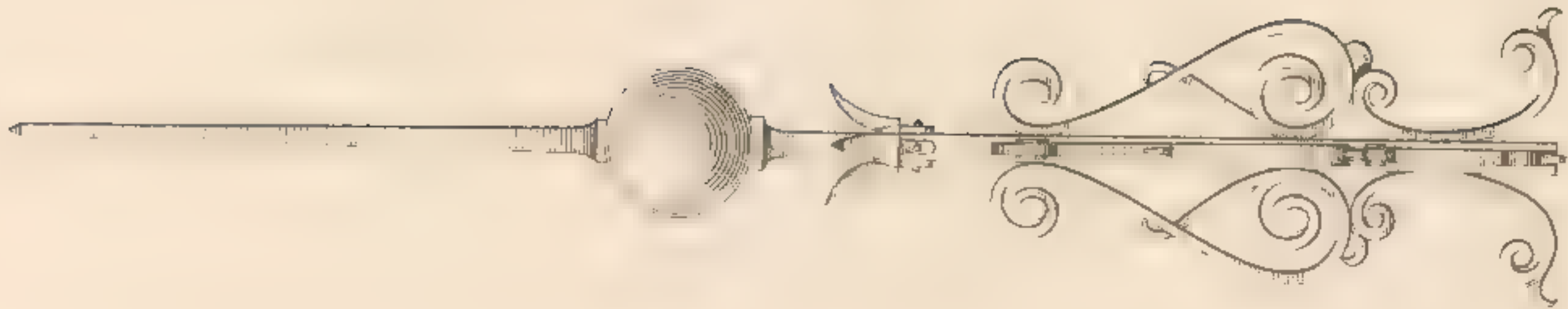
1/2 1/2 1/2 1/2

MACFARLANE'S TERMINALS & C

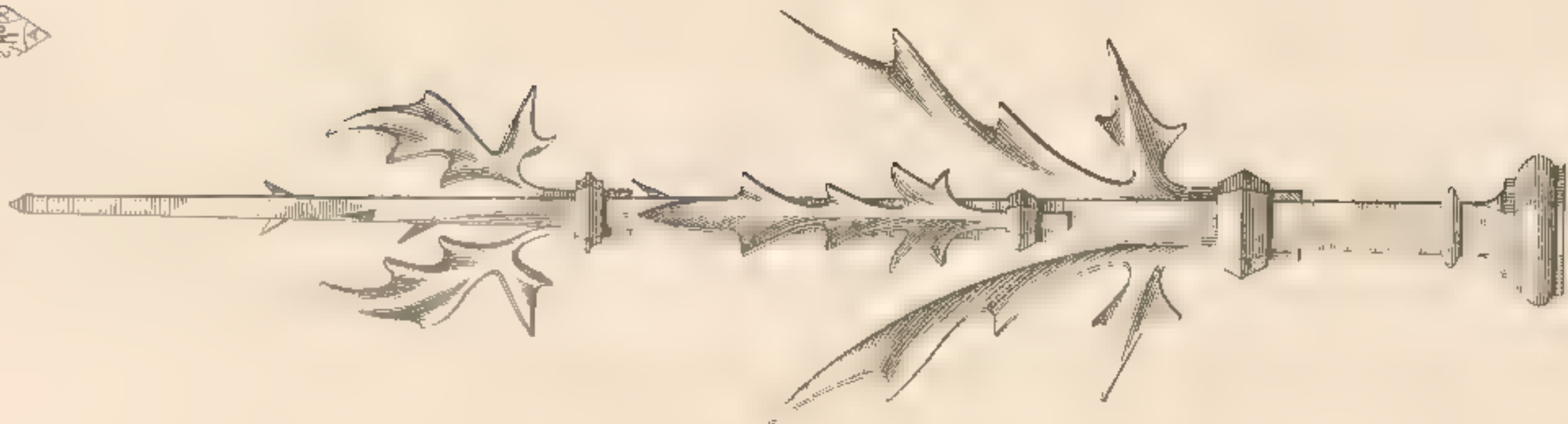
224



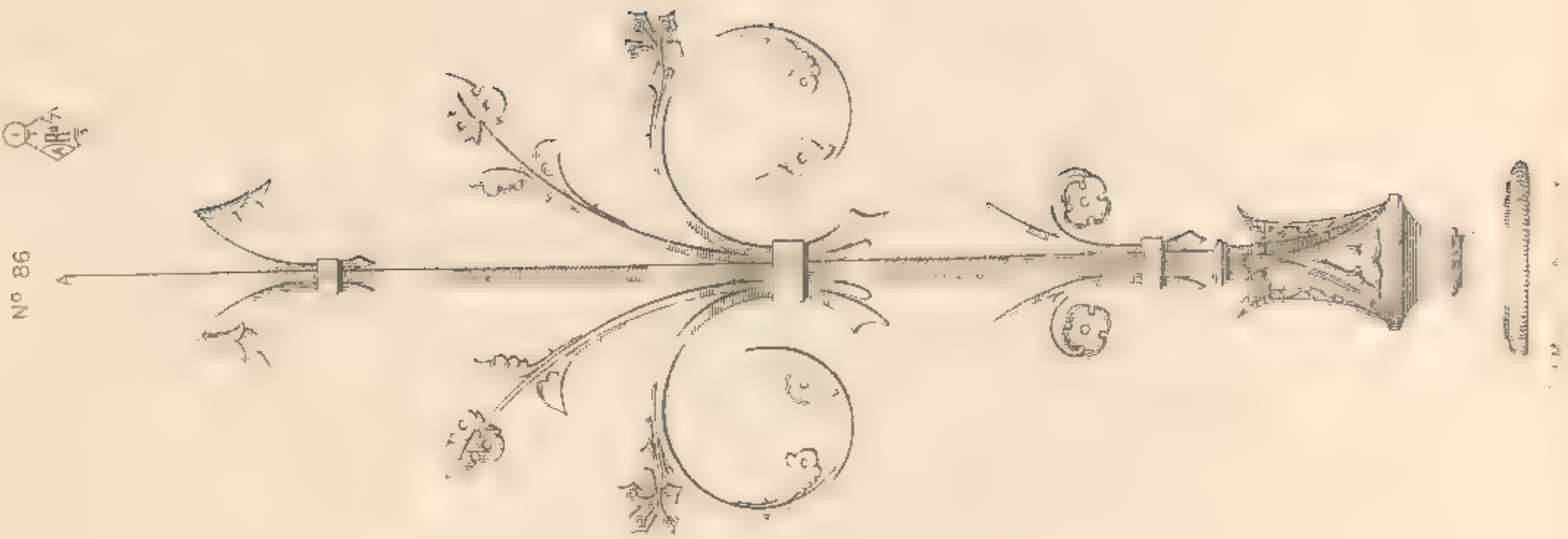
225



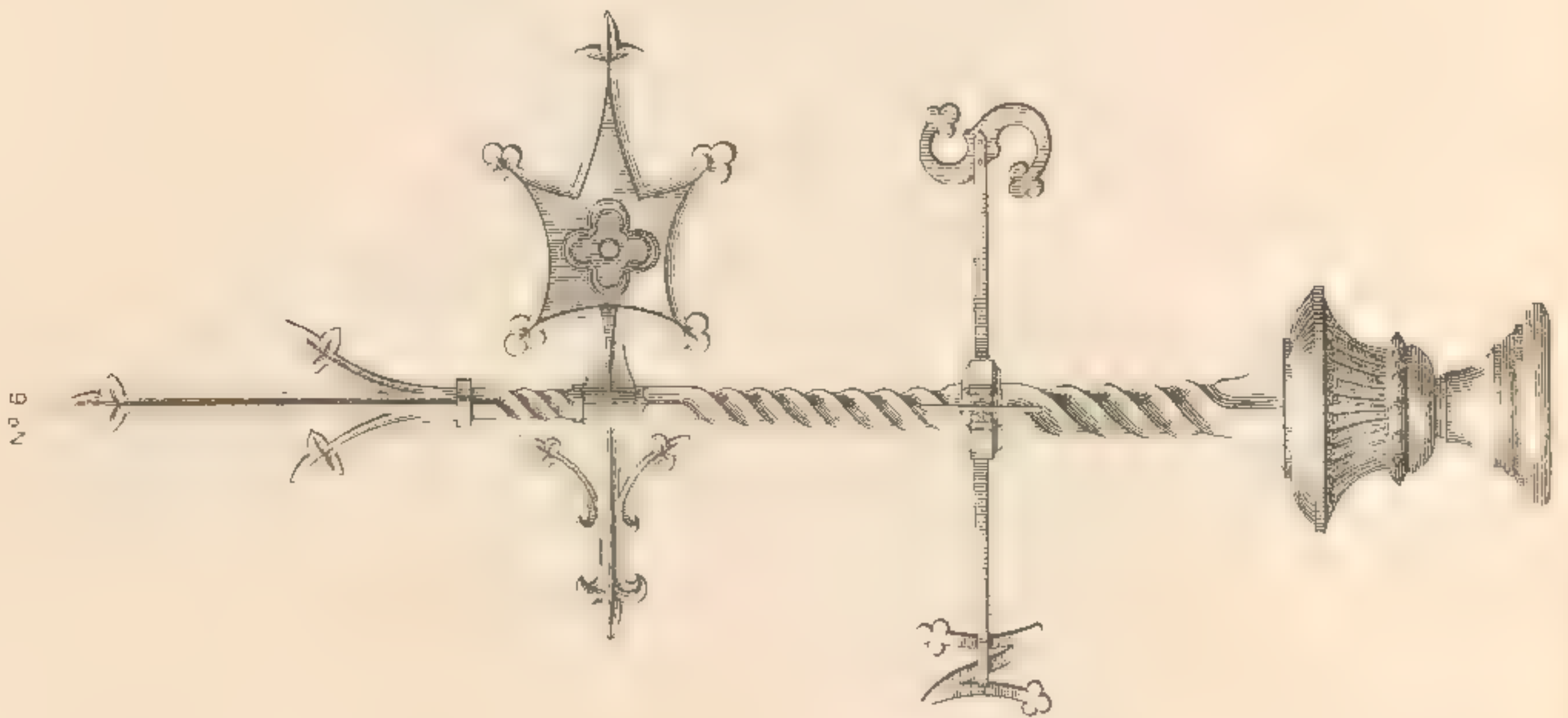
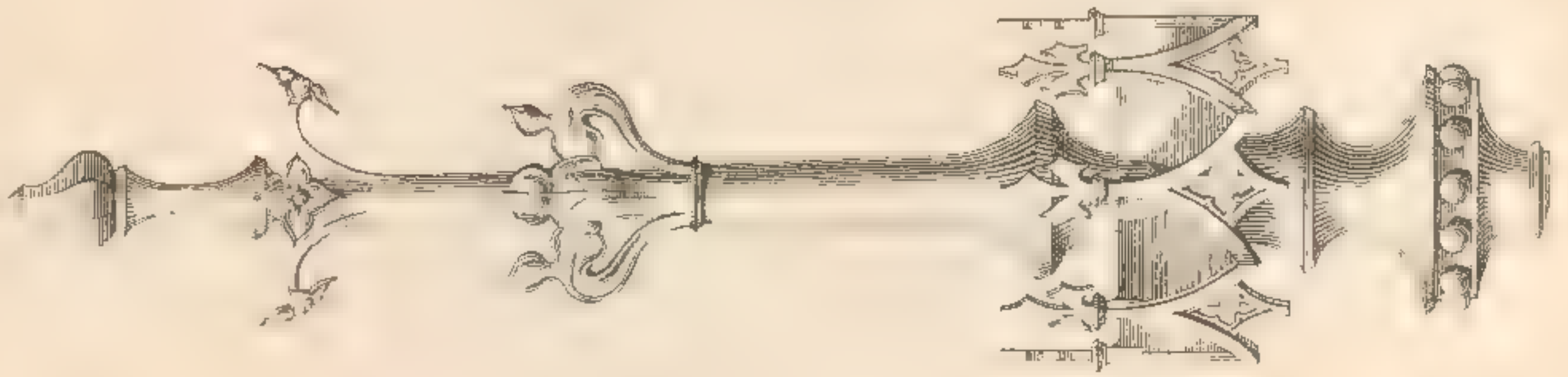
226

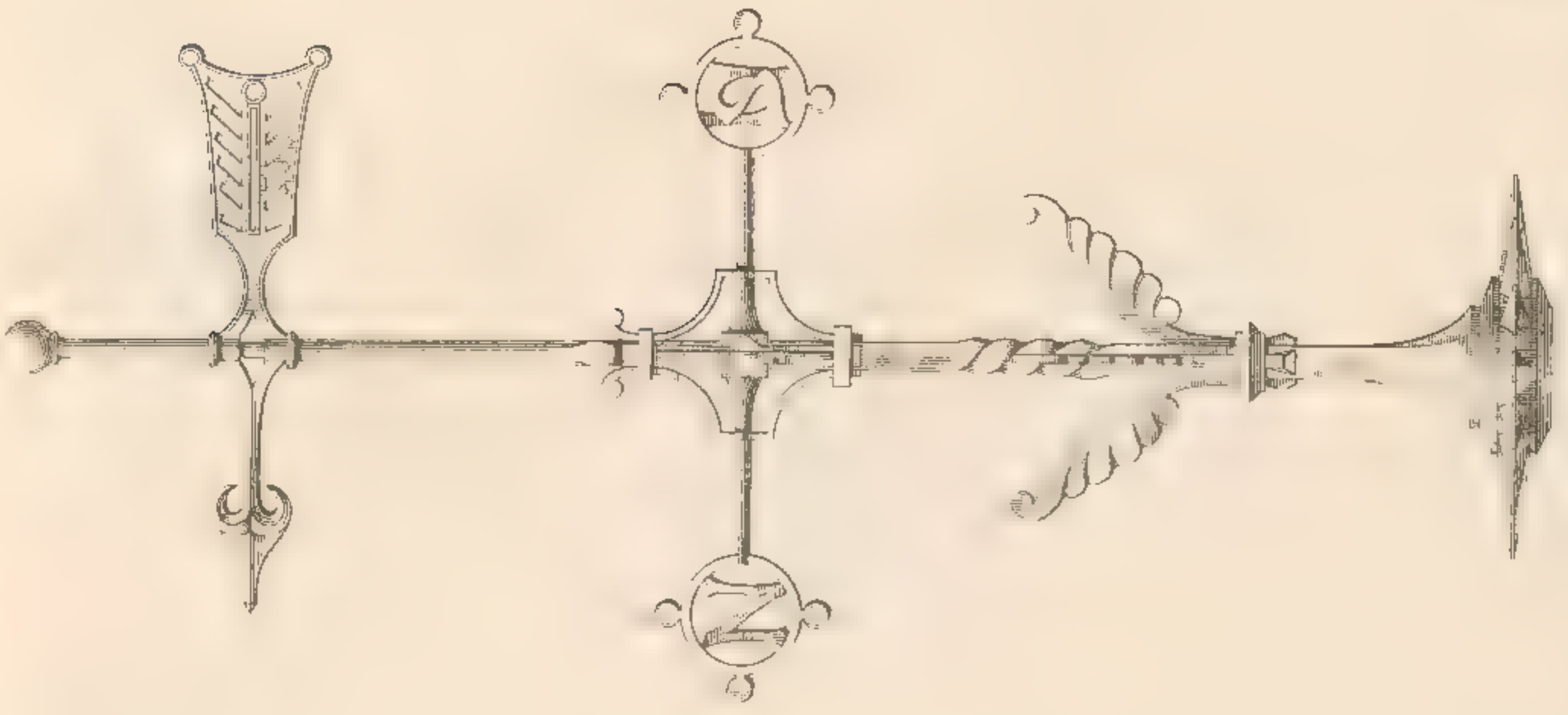


SCALE 1 INCH = FOOT

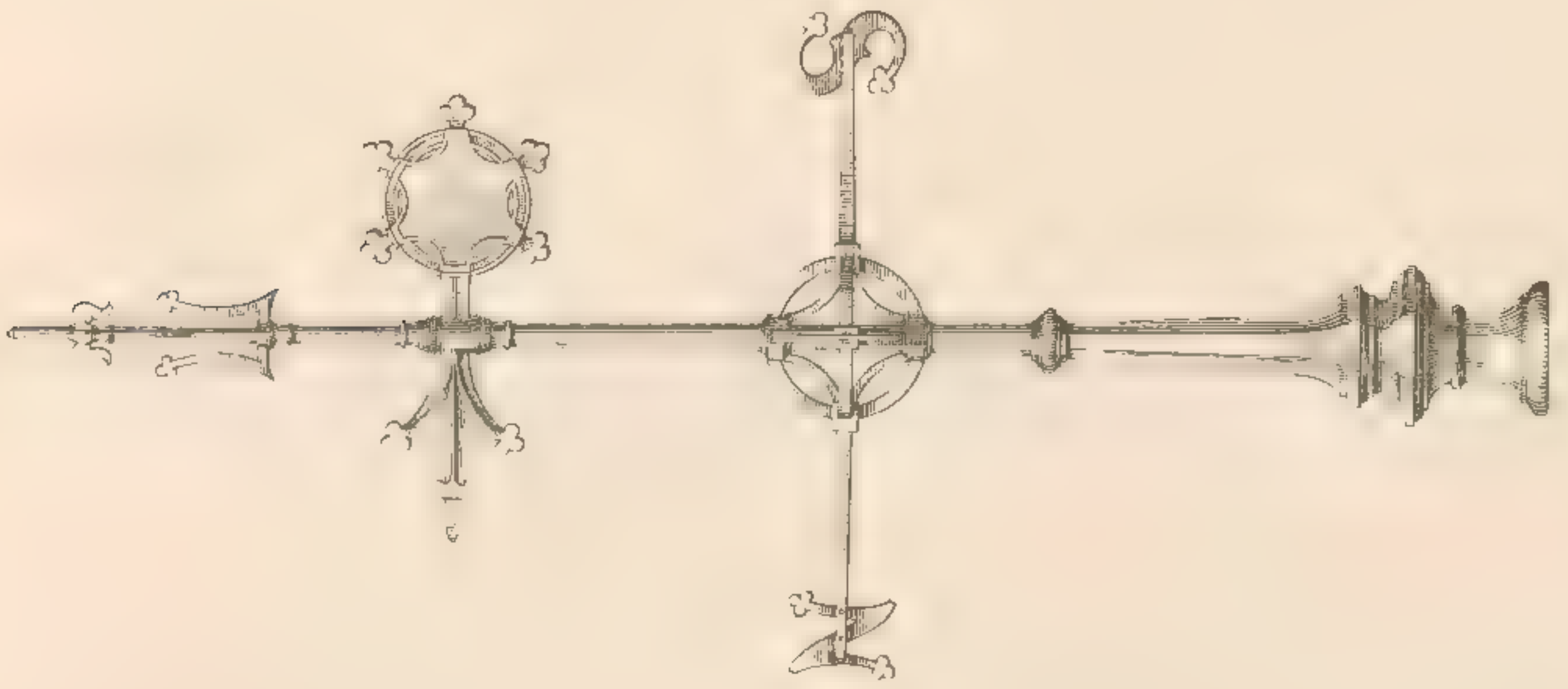


MACFARLANE'S TERMINALS &C.
No 79

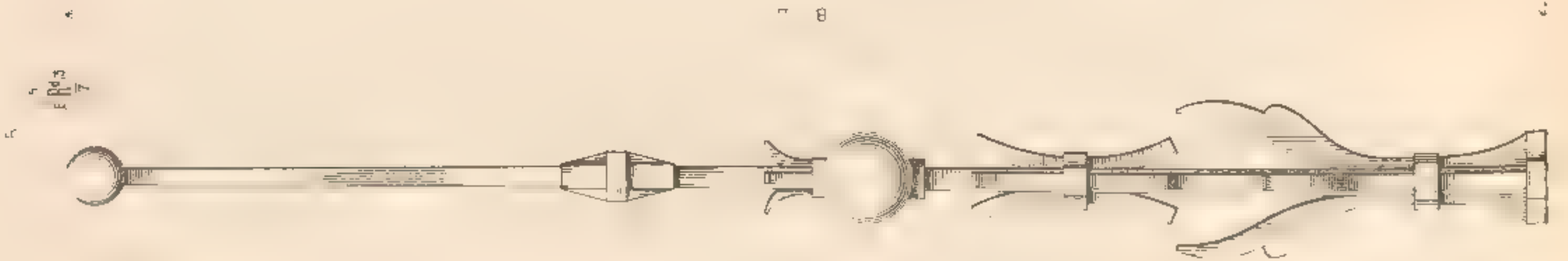
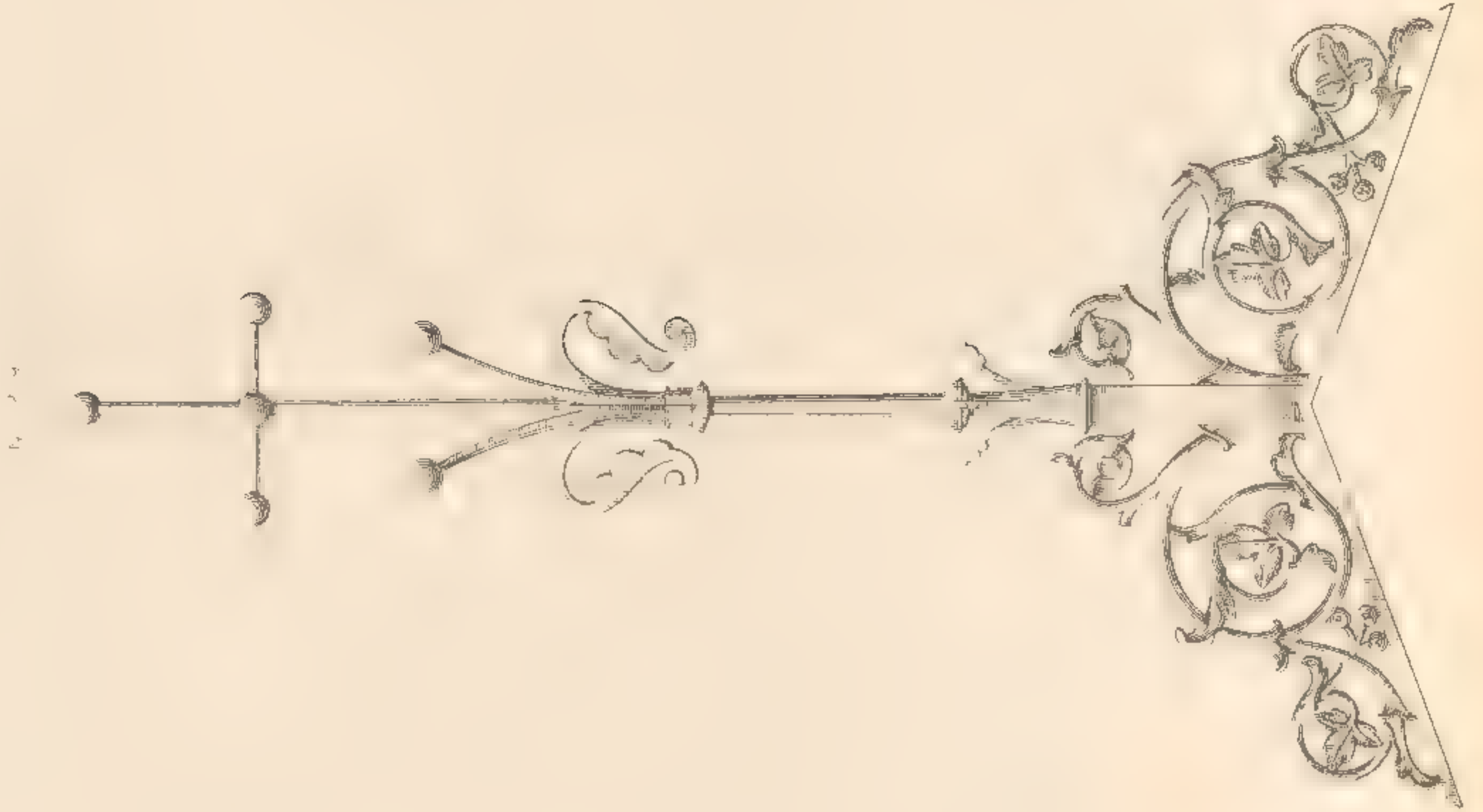
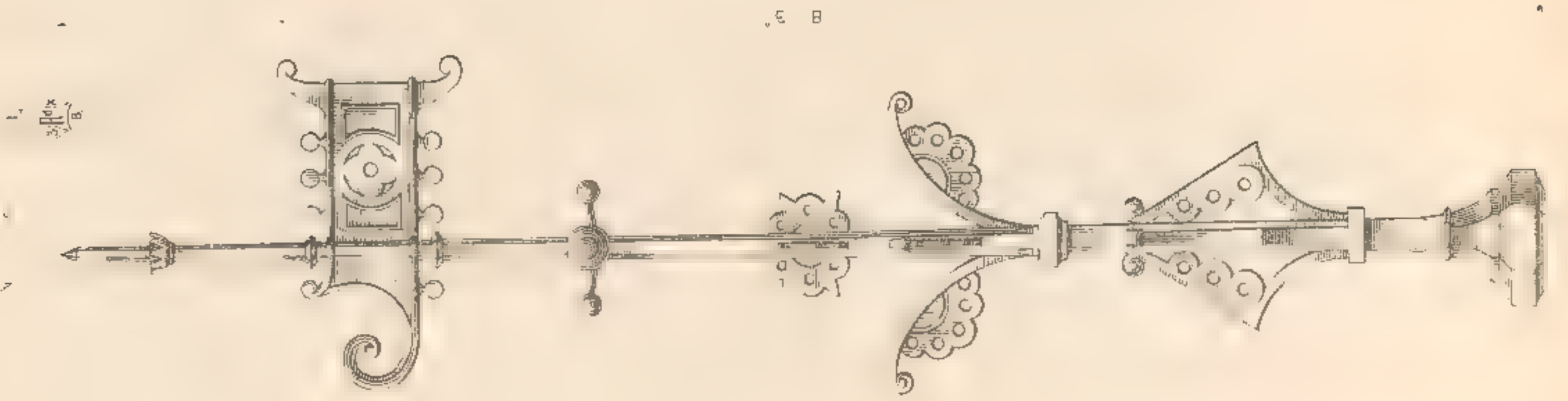




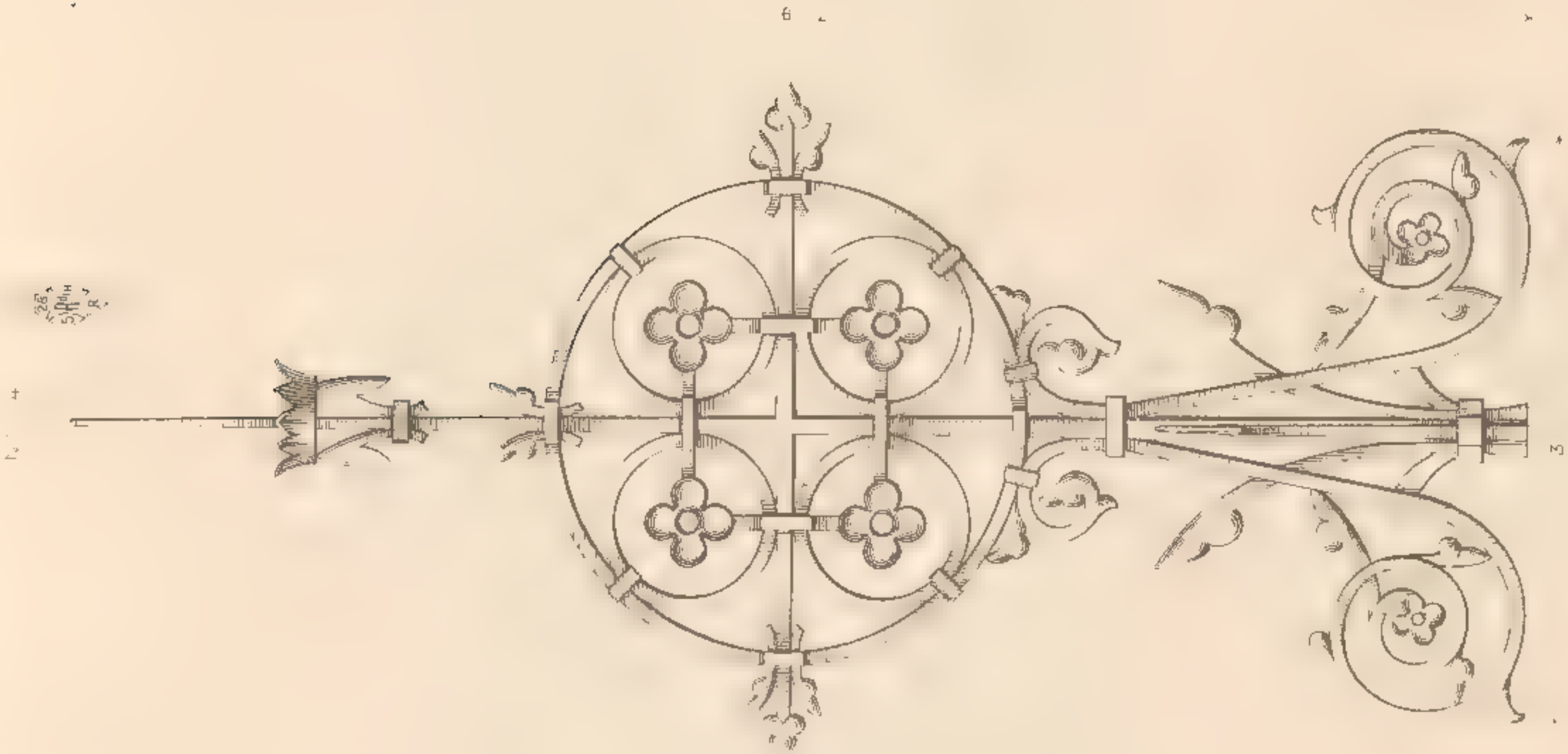
SCALE 1/4 INCH = 1 FOOT



MACFARLANES TERMINALS & C

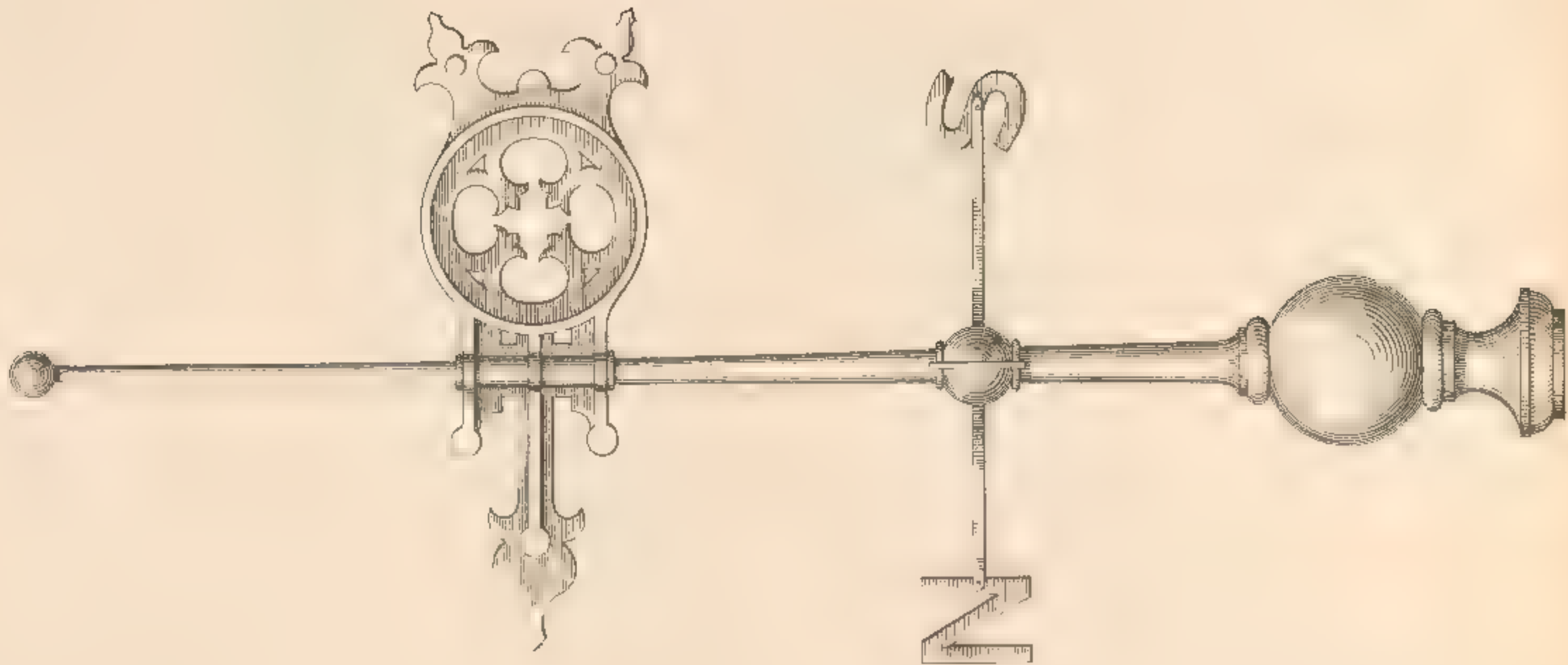


ARMS 2 AND 4 WAYS
SCALE INCH = FOOT



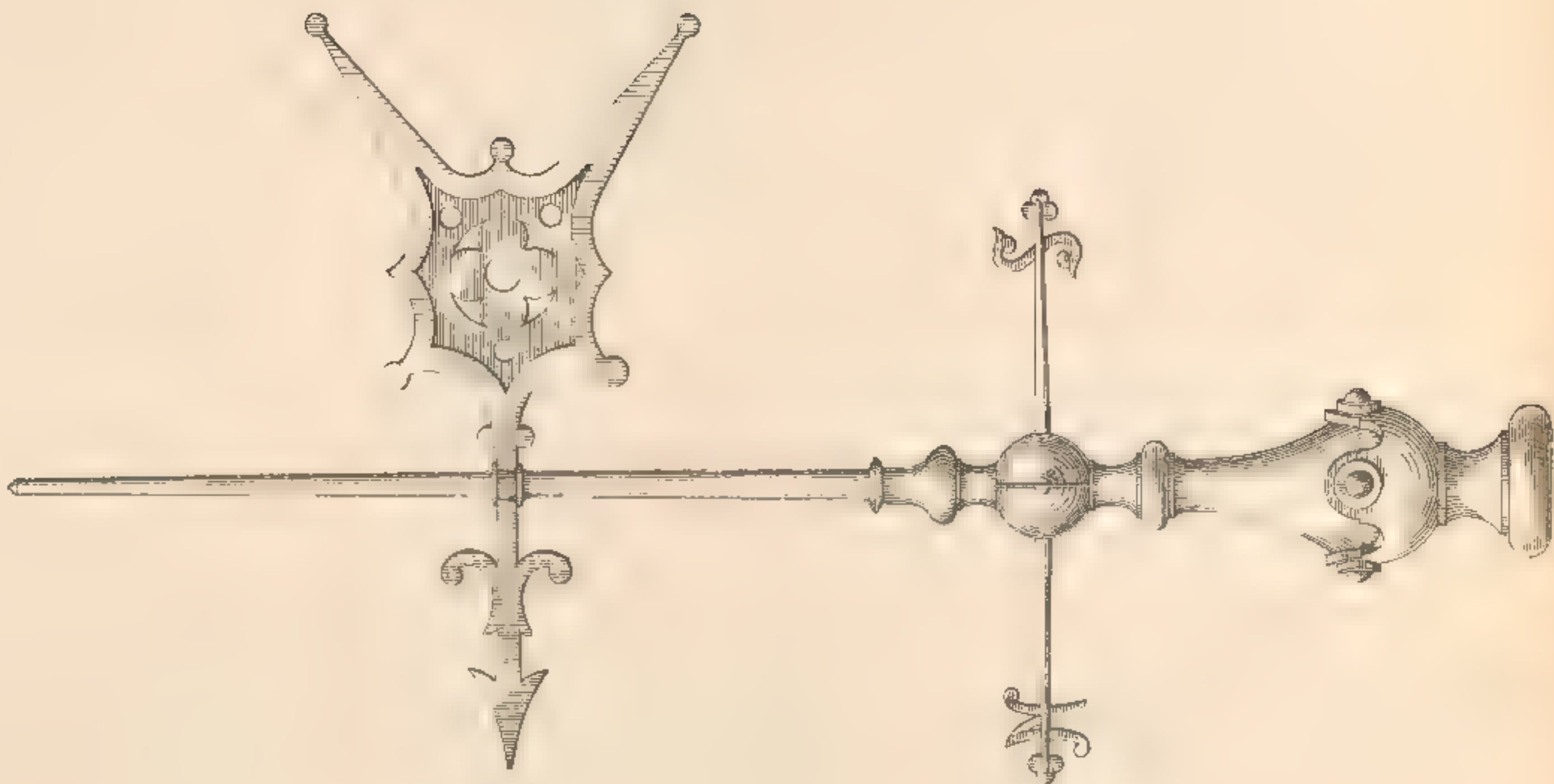
MACFARLANE'S TERNALS & C

No 65



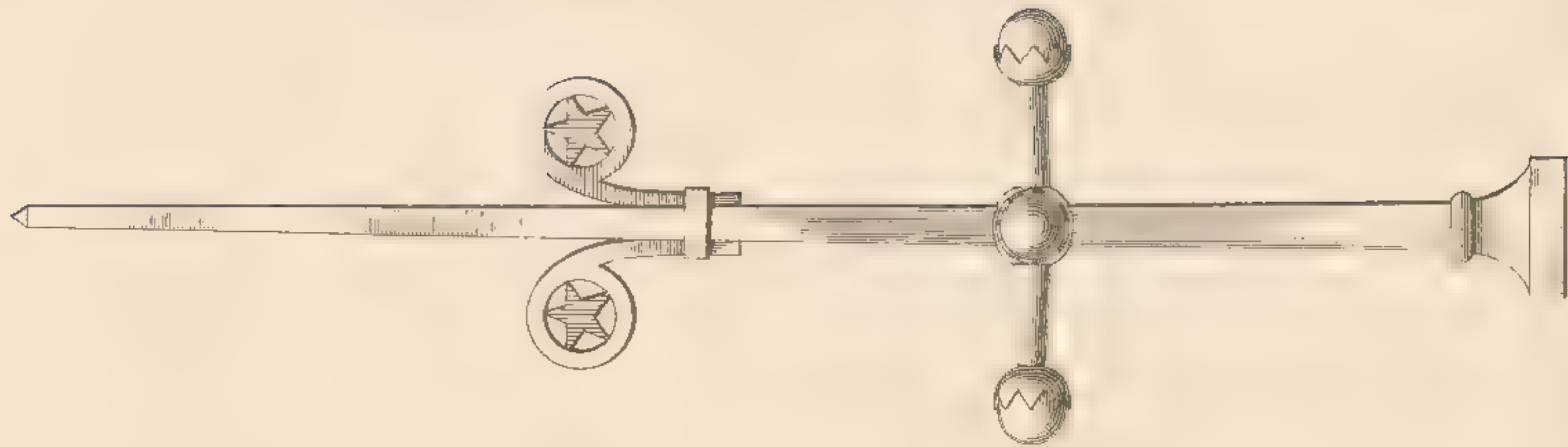
8 8

No. 22



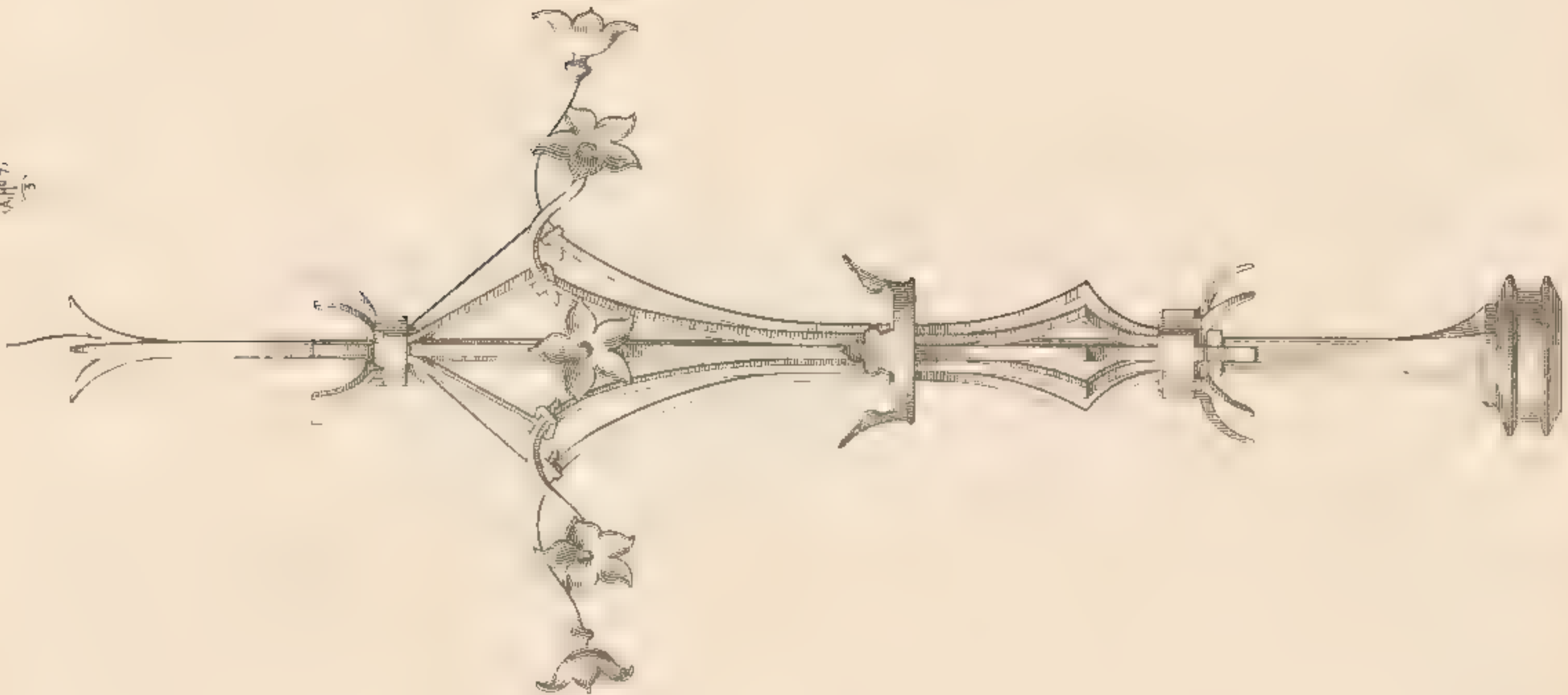
8 0

No 32



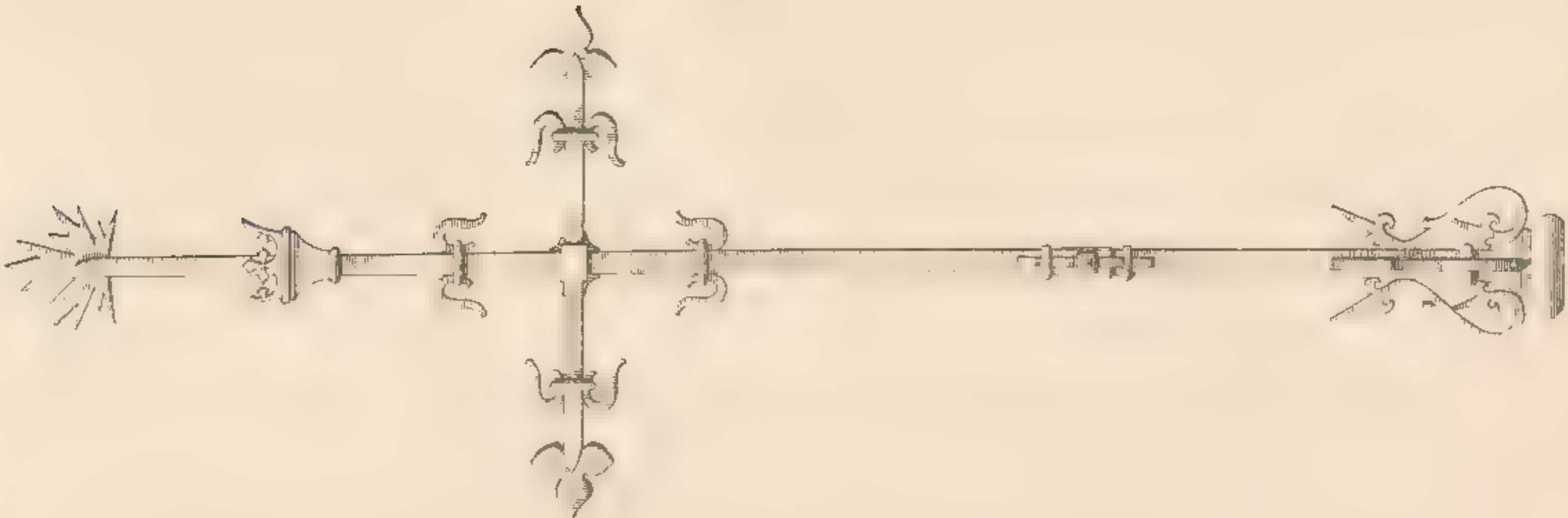
ARMS 2 AND 4 WAY

No 33



ARMS 2 AND 4 WAY

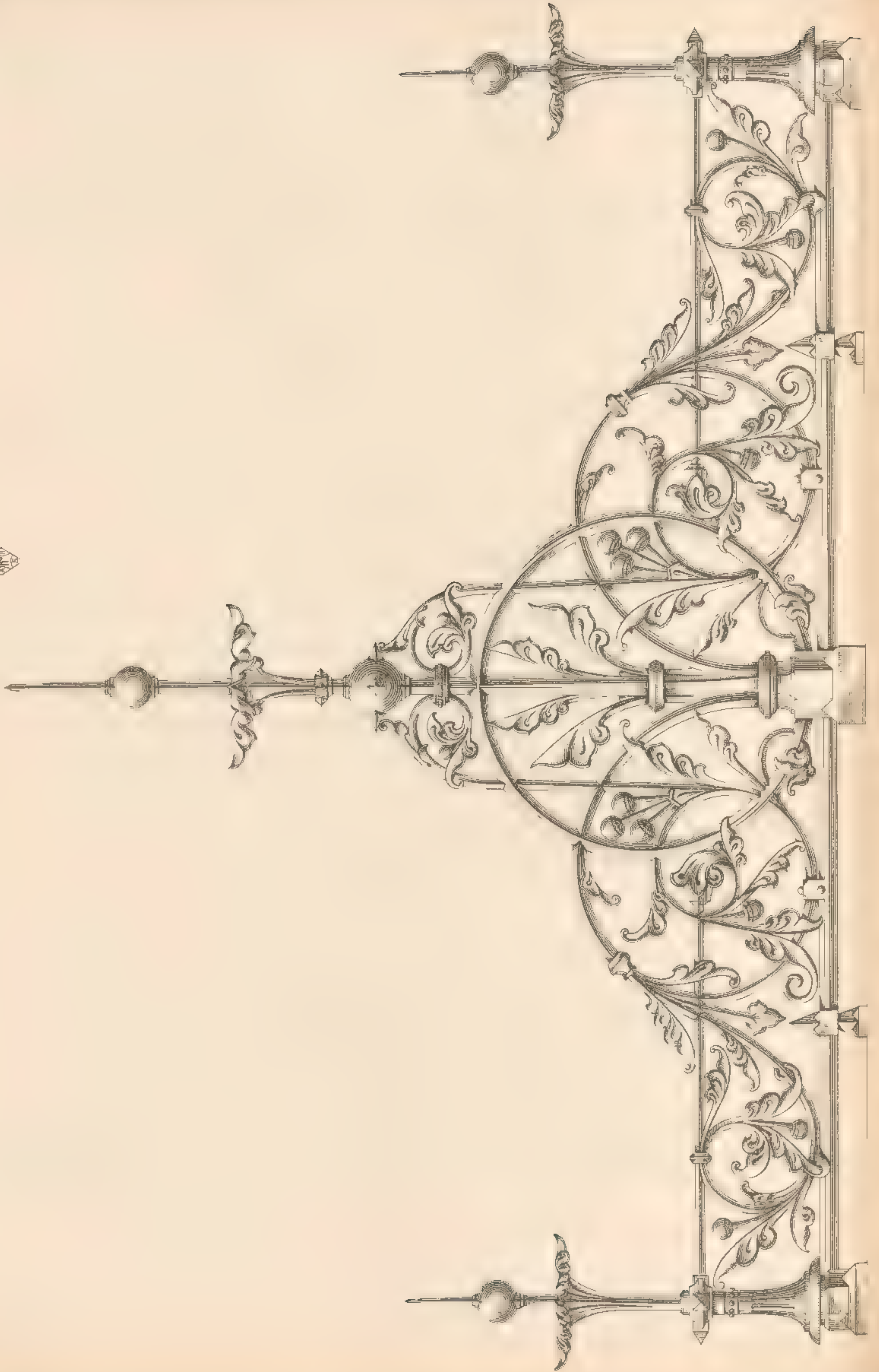
No 26



MACFARLANE'S TERMINALS & C



No 169



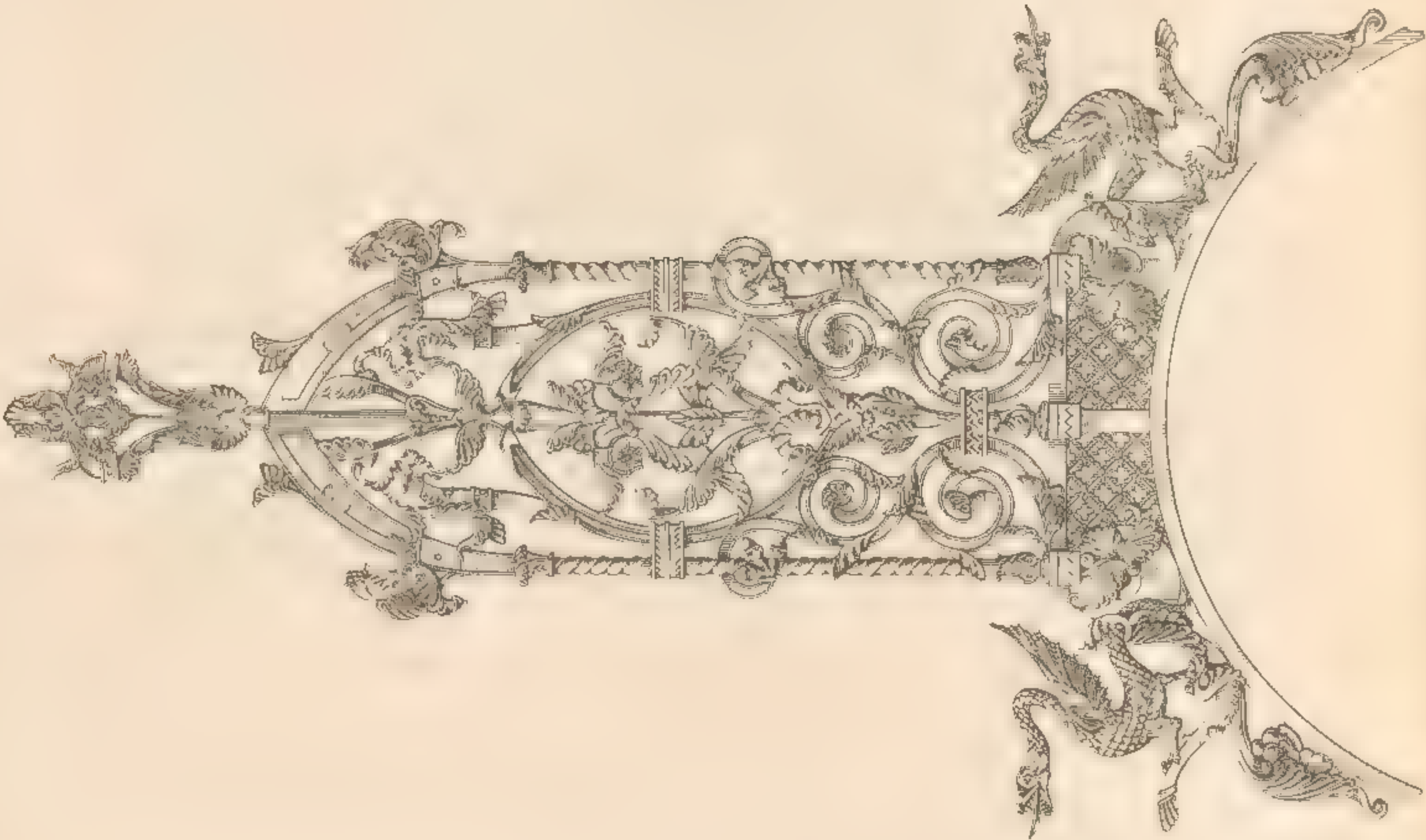
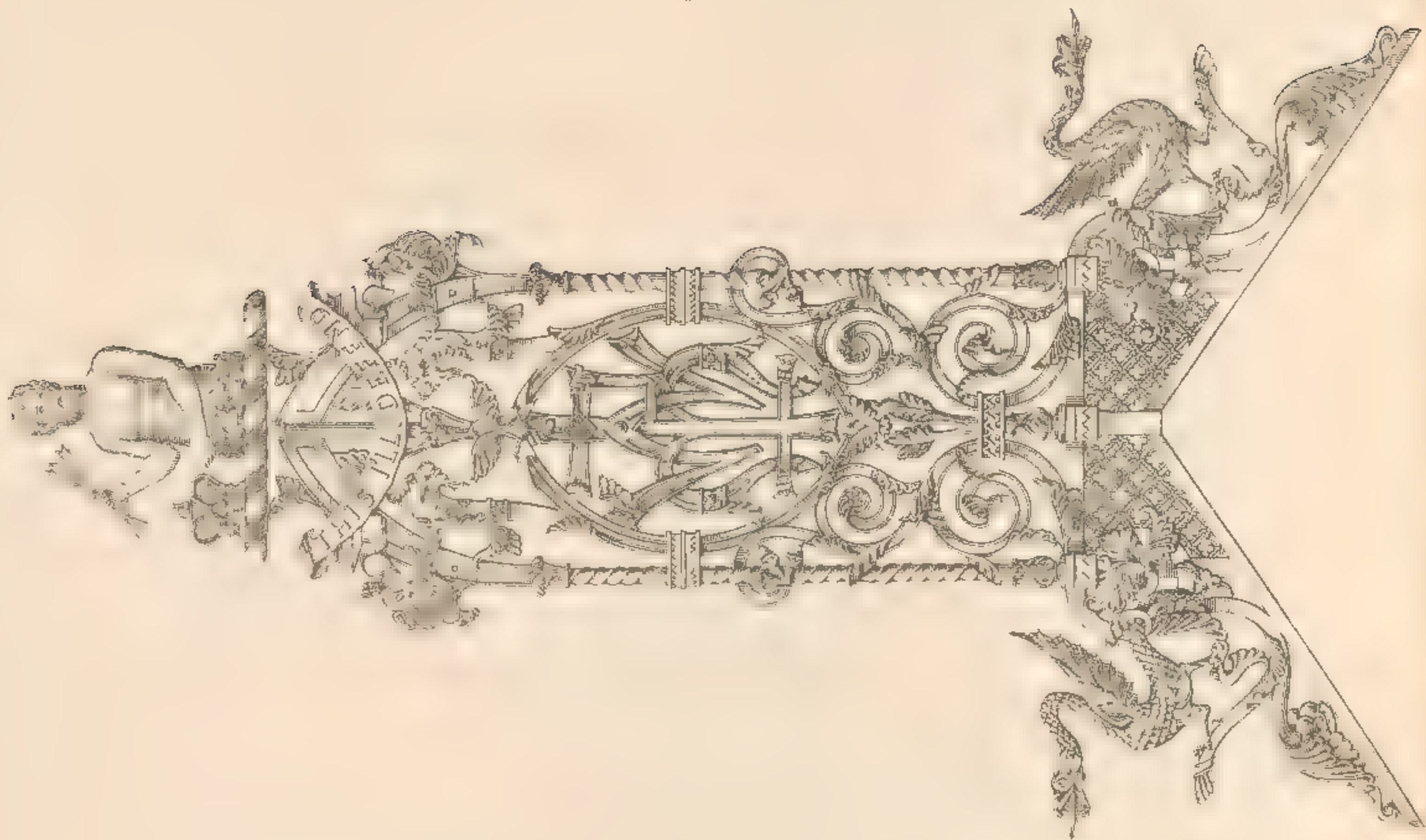
MACFARLANE'S TERMINALS &c



No 92

MACFARLANE'S TERMINALS & C

No 92

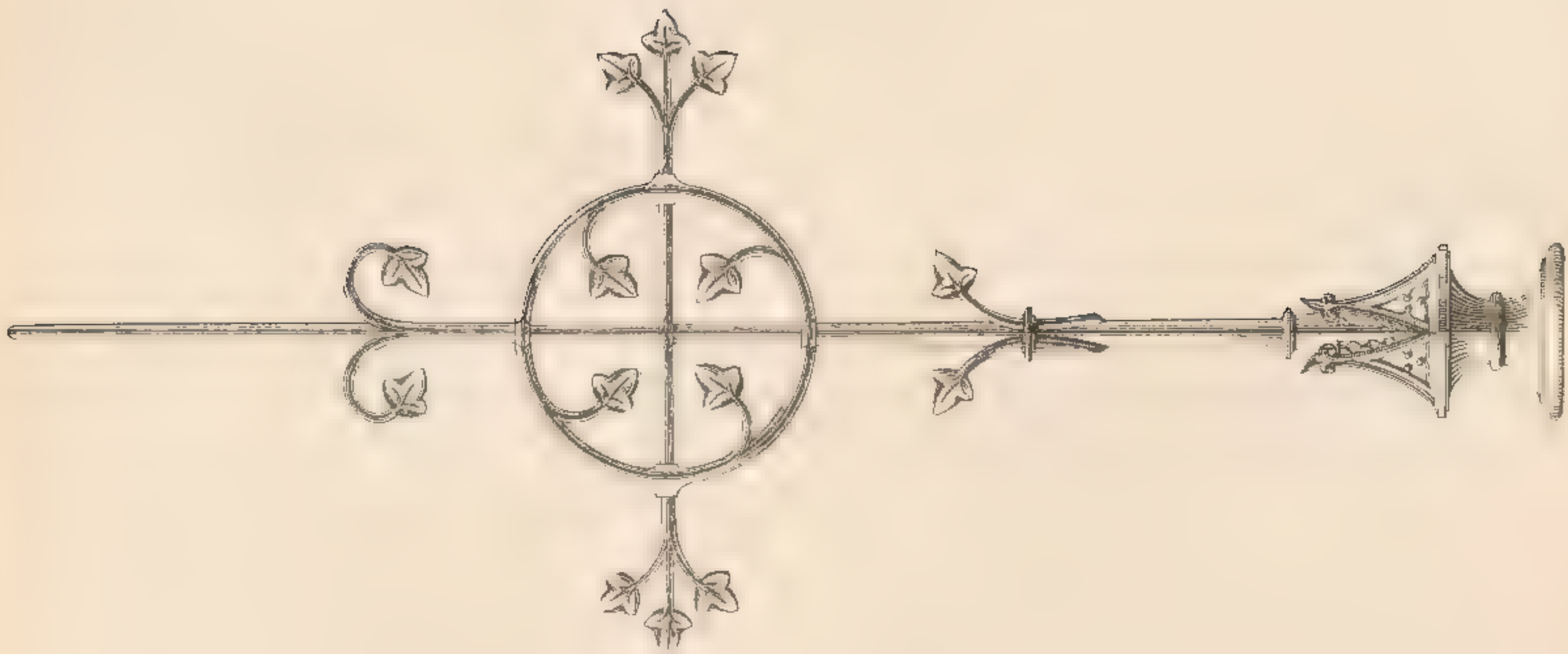


The lower portion of these Terminals can be made to suit any outline of wall, and any particular Crest or Monogram can be substituted for those shown, *to order*.

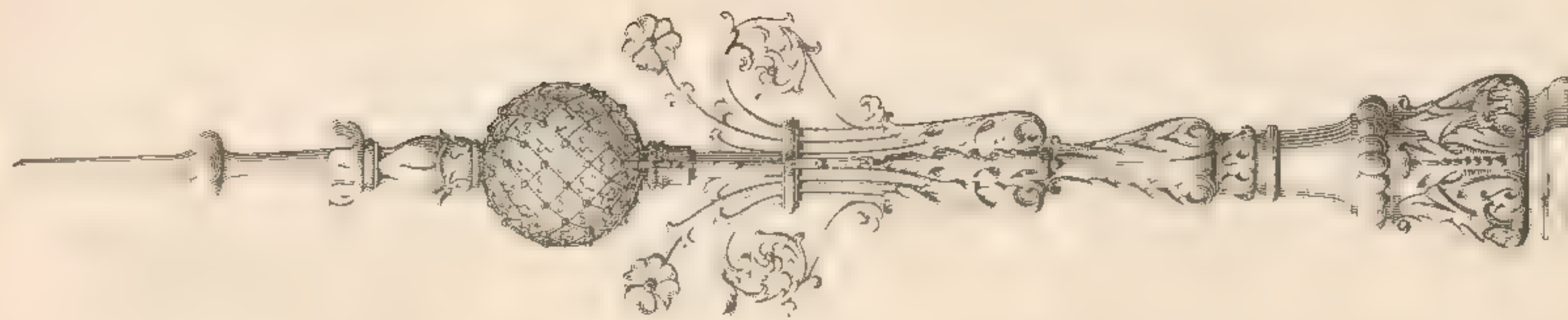
0 6

No 25

CH. R. T. H. M. R. A. S. 80



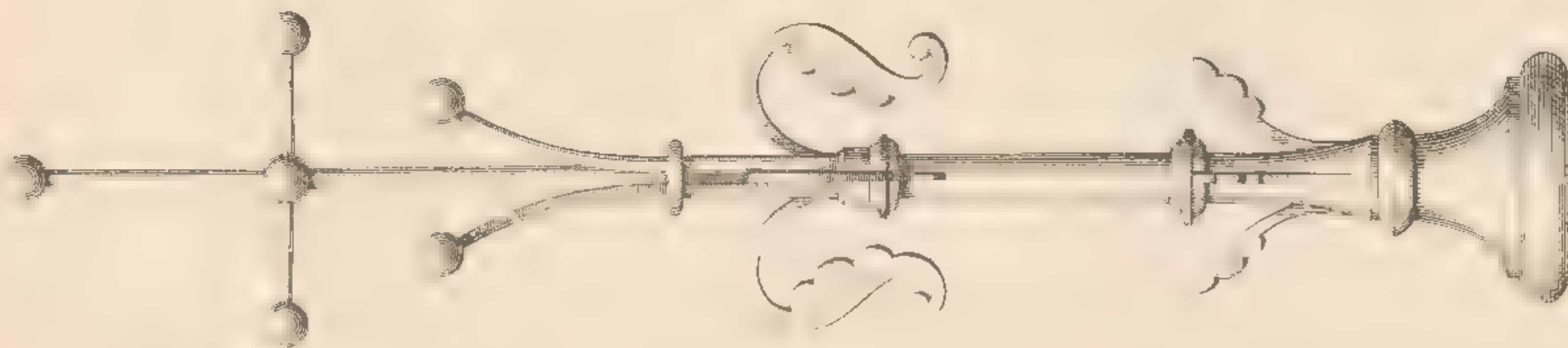
ARMS 2 AND 4 WAYS



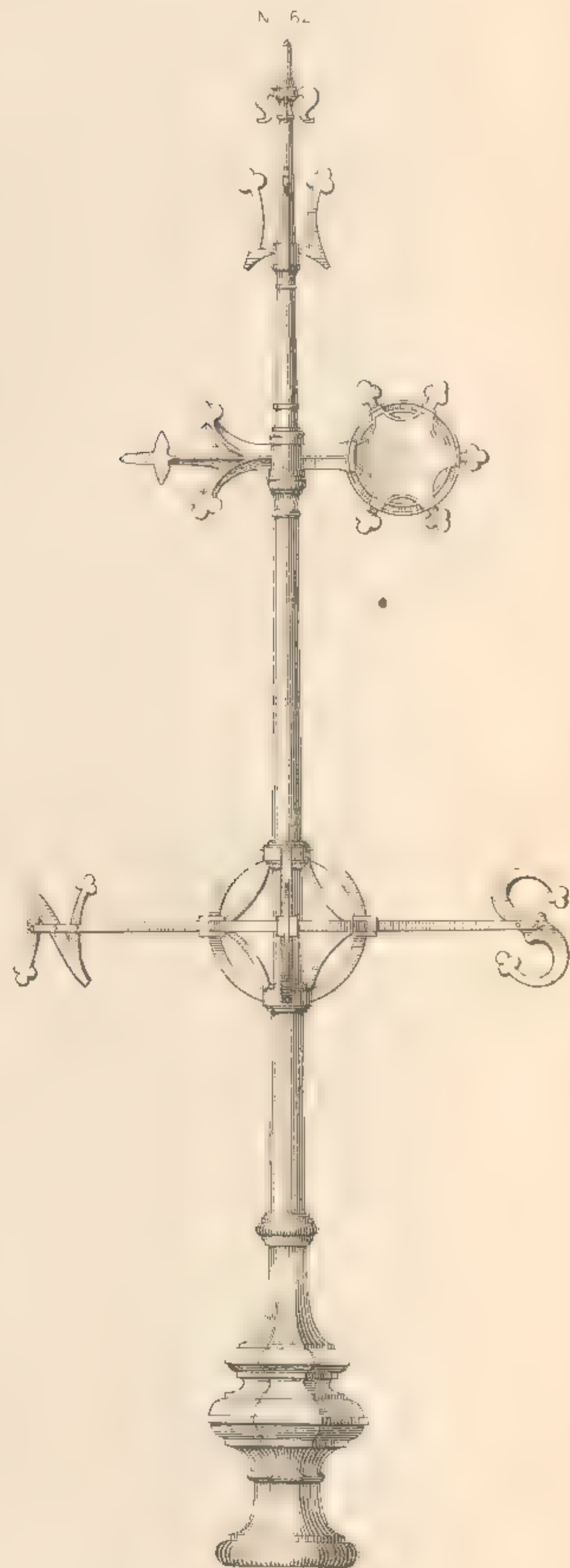
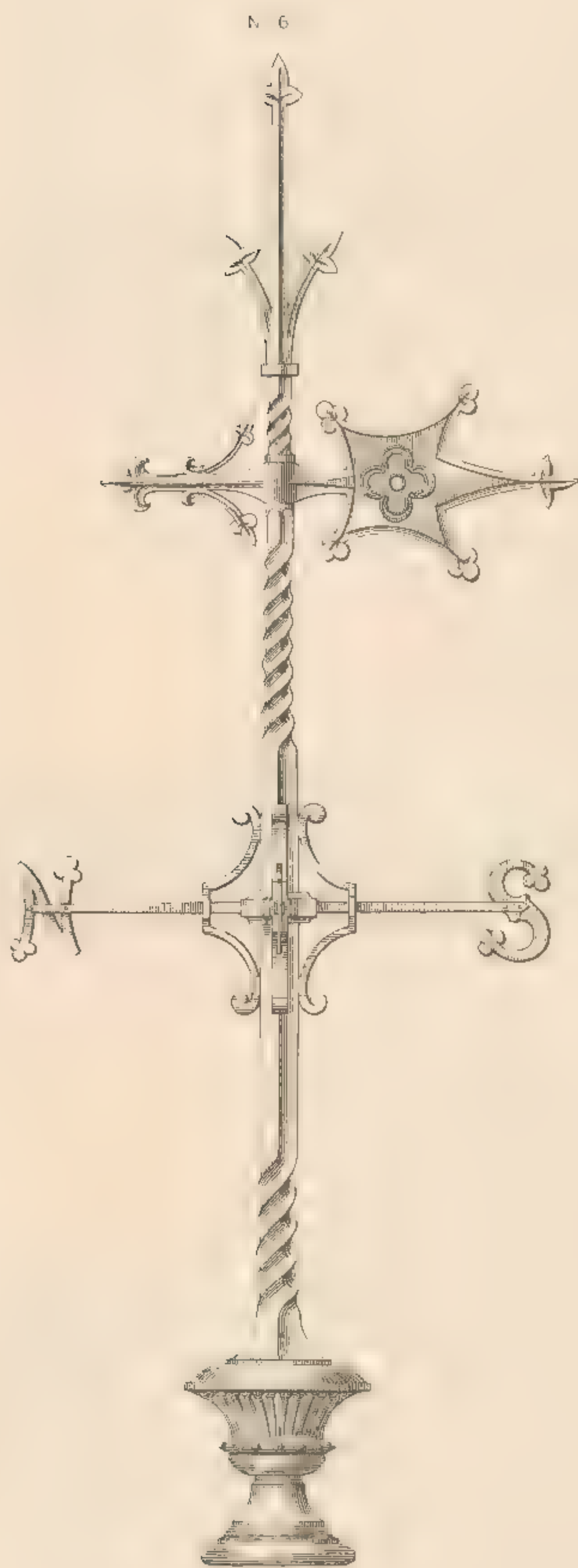
SCALE 1 INCH = 1 FOOT

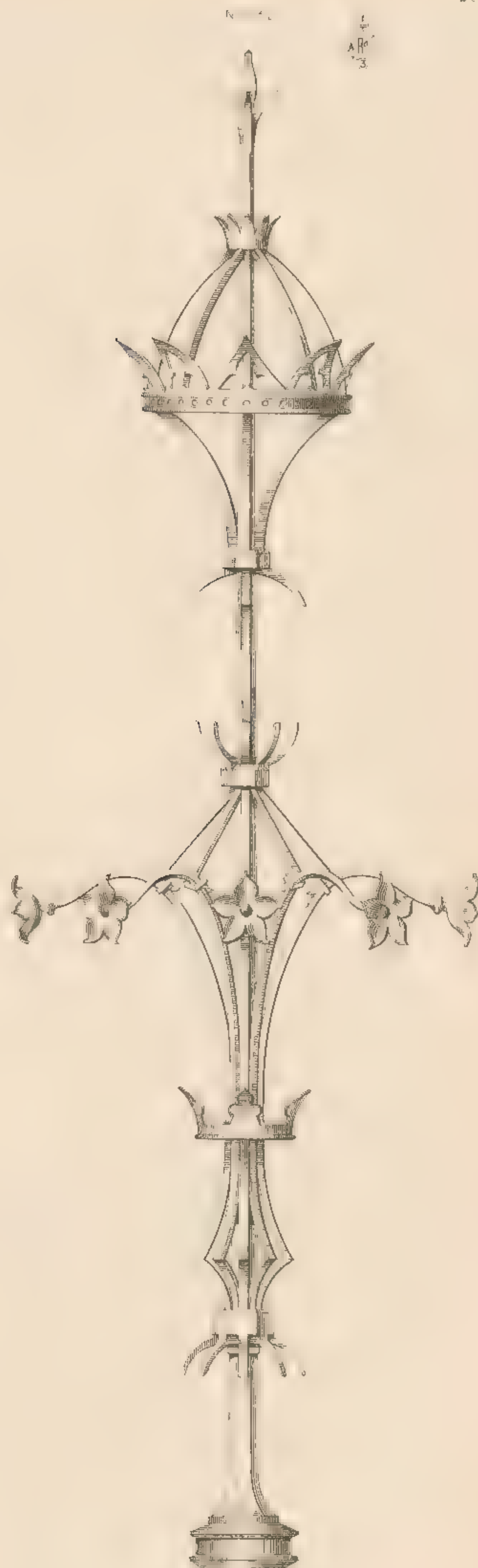
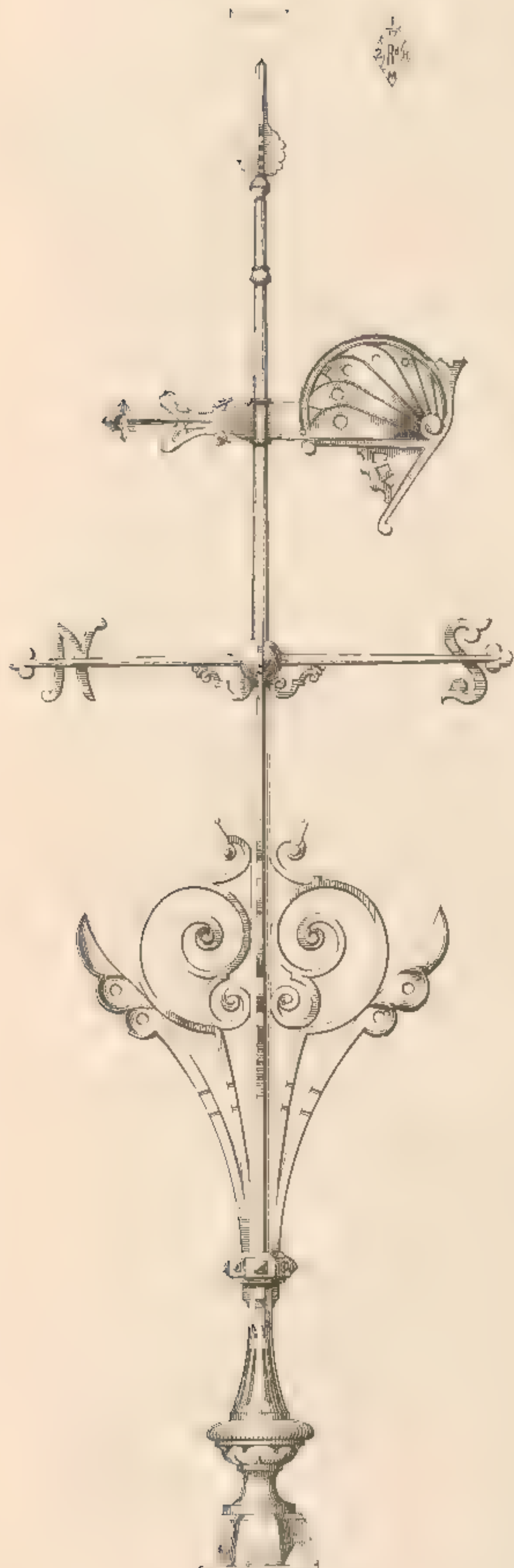
0 6

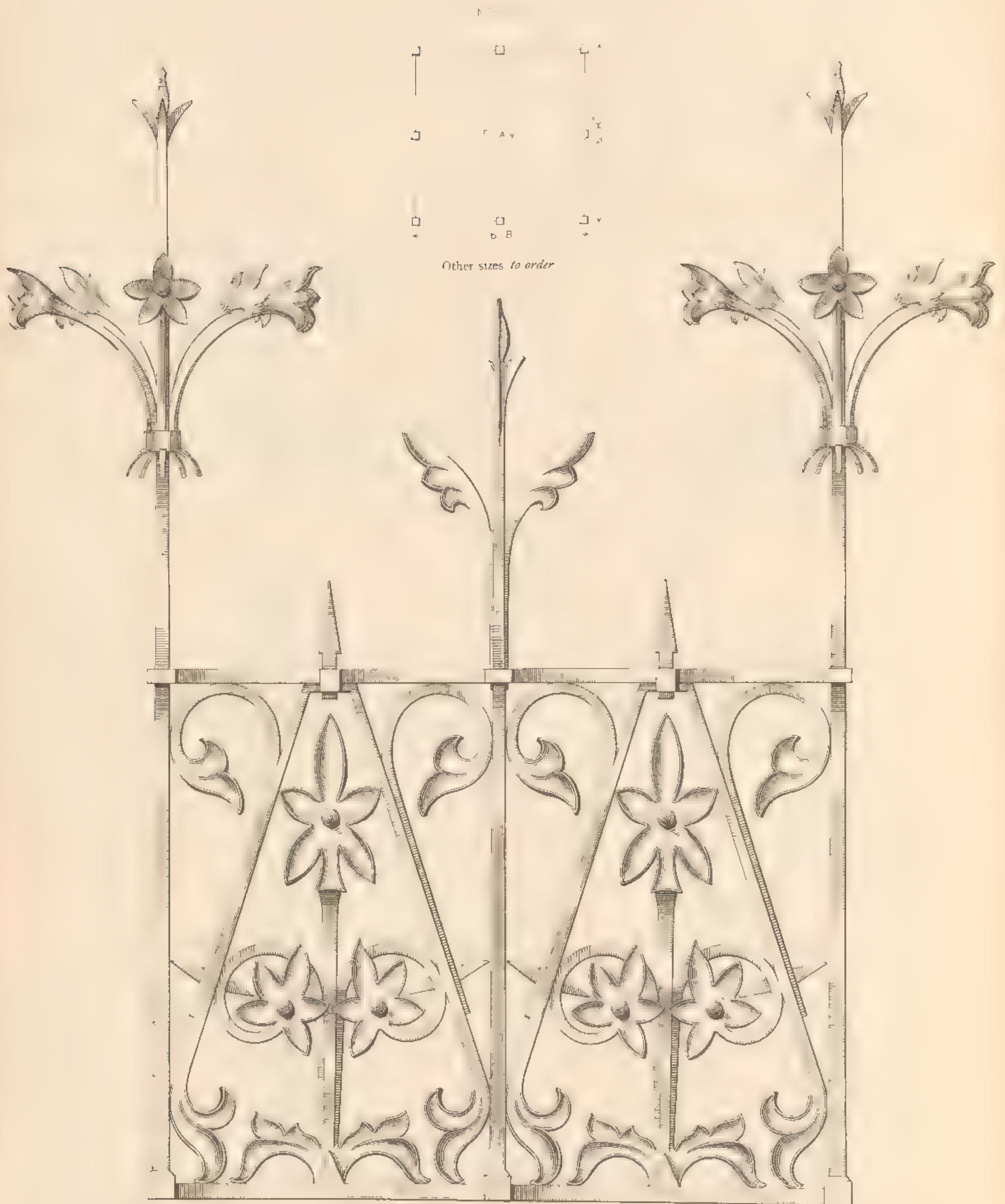
No 26

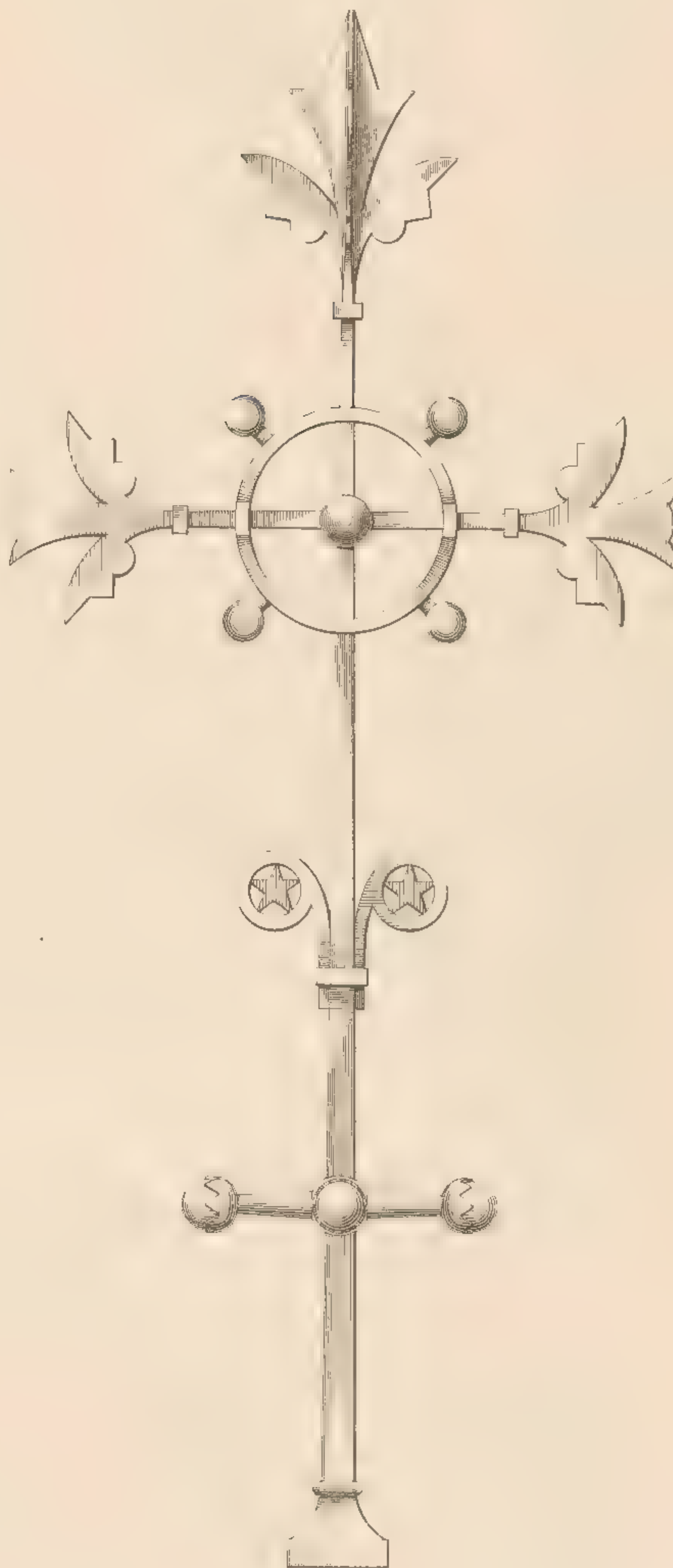


MACFARLANE'S TERMINALS &c









ARMS 2 AND 4 WAYS

SCALE INCH = 1 FOOT

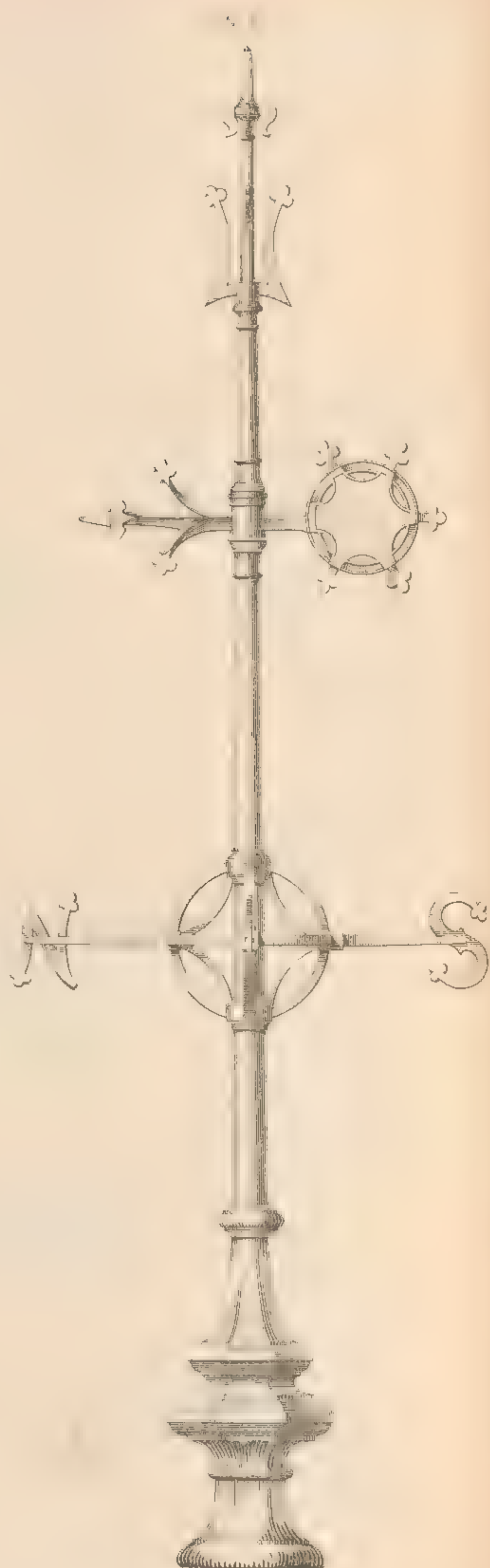


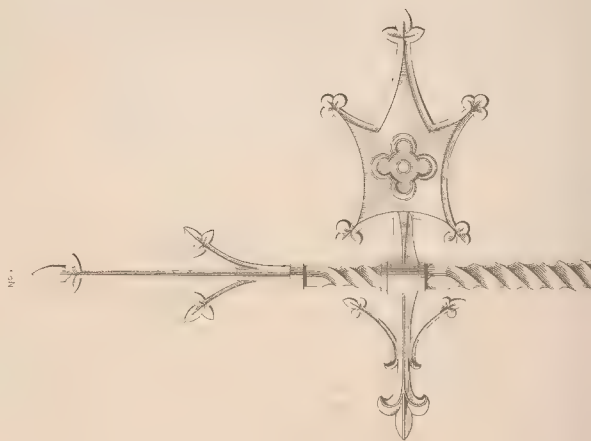
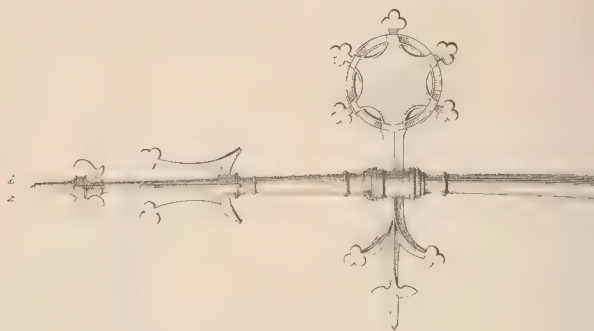
Fig. 4.

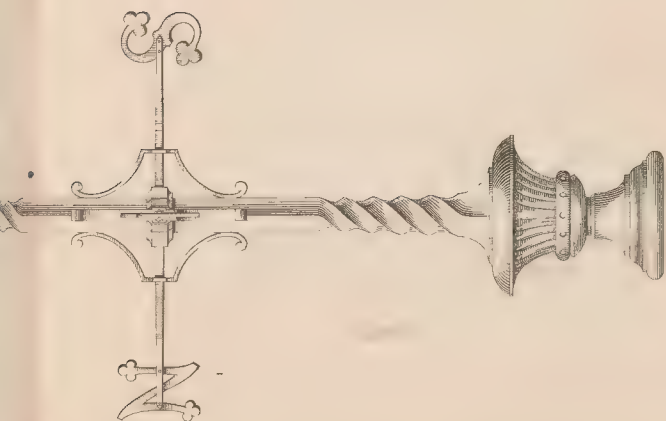
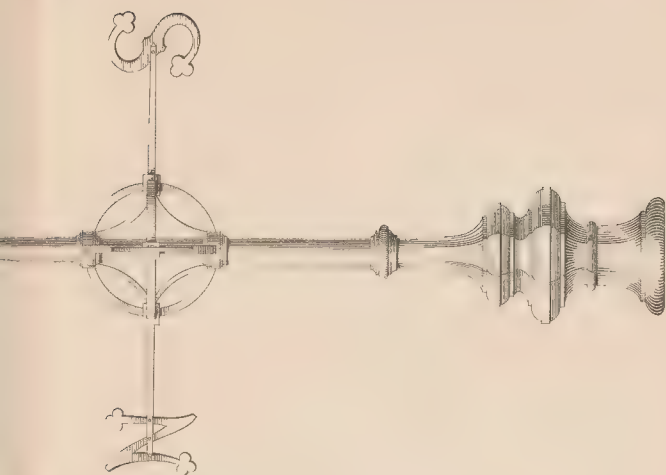


Other sizes to order.

SCALE 1/2 INCH = 1 FOOT

MACULARIAE TERMINALS &c





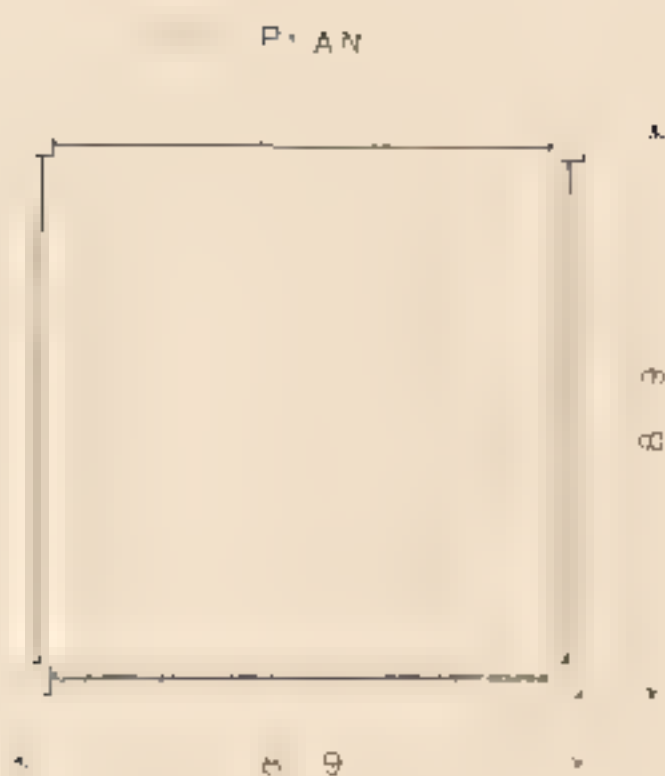


This Terminal can also be supplied square, measuring 6' 3" x 6' 3" on plan, also other sizes to order.

SCALE 1/2 INCH = 1 FOOT

N^o 48

$\frac{1}{4}$
A 11 7
3

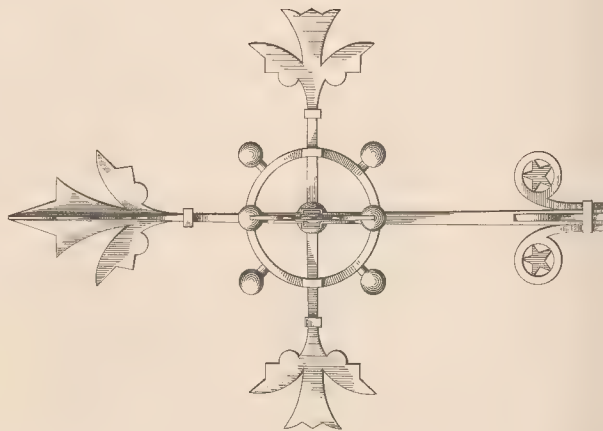


Other sizes to order

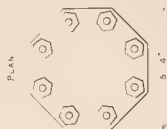


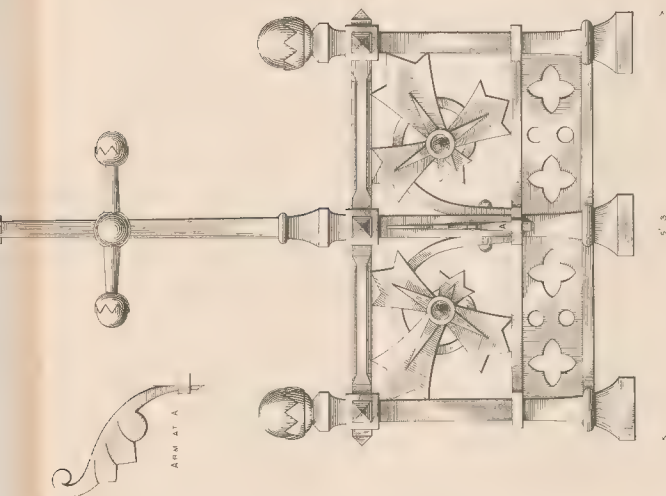
MACFARLANE'S TERMINALS &c

No 32

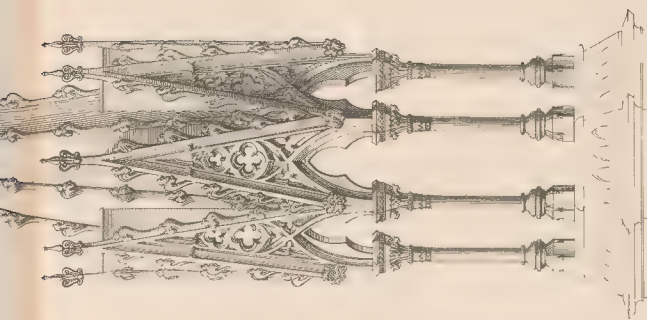


No 246





SCALE INCH — | FOOT



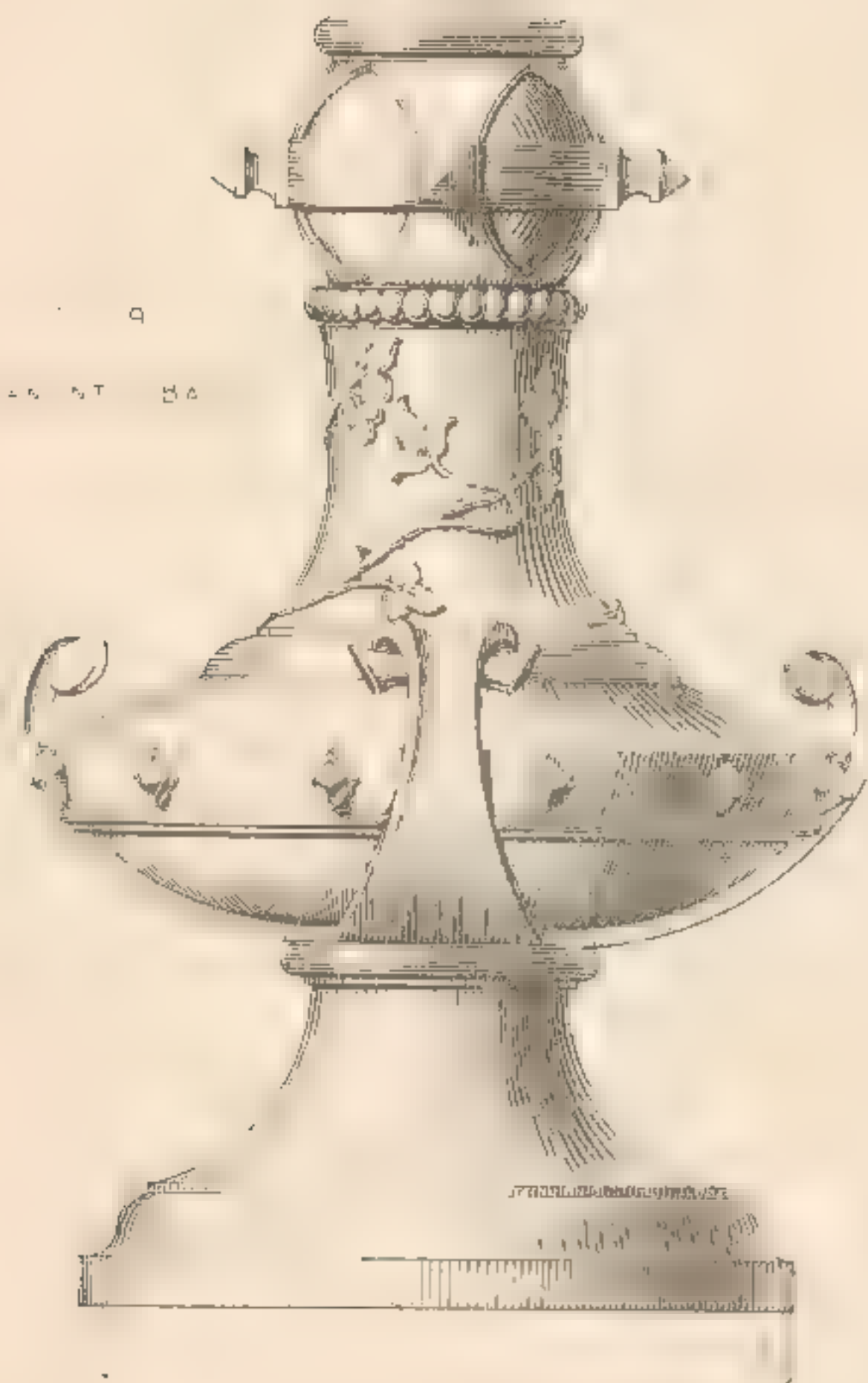
The main body of canopy is timber, covered with lead, and cast-iron cruckers.

SCALE 1/2 INCH — | FOOT.

No 250 EAGLE (COPPER)



No 119

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SCALE INCH — 1 FOOT

SCALE 3/8 INCH — 1 FOOT

Flagstaff (red pine) with Cast-iron Cylinder Socket, 9' 0" long, No. 119 Ornamental Base, No. 250 Eagle Terminal (in copper), Fittings, &c.

MACFARLANE'S TERMINALS & C

NO 261. DORMER WINDOW

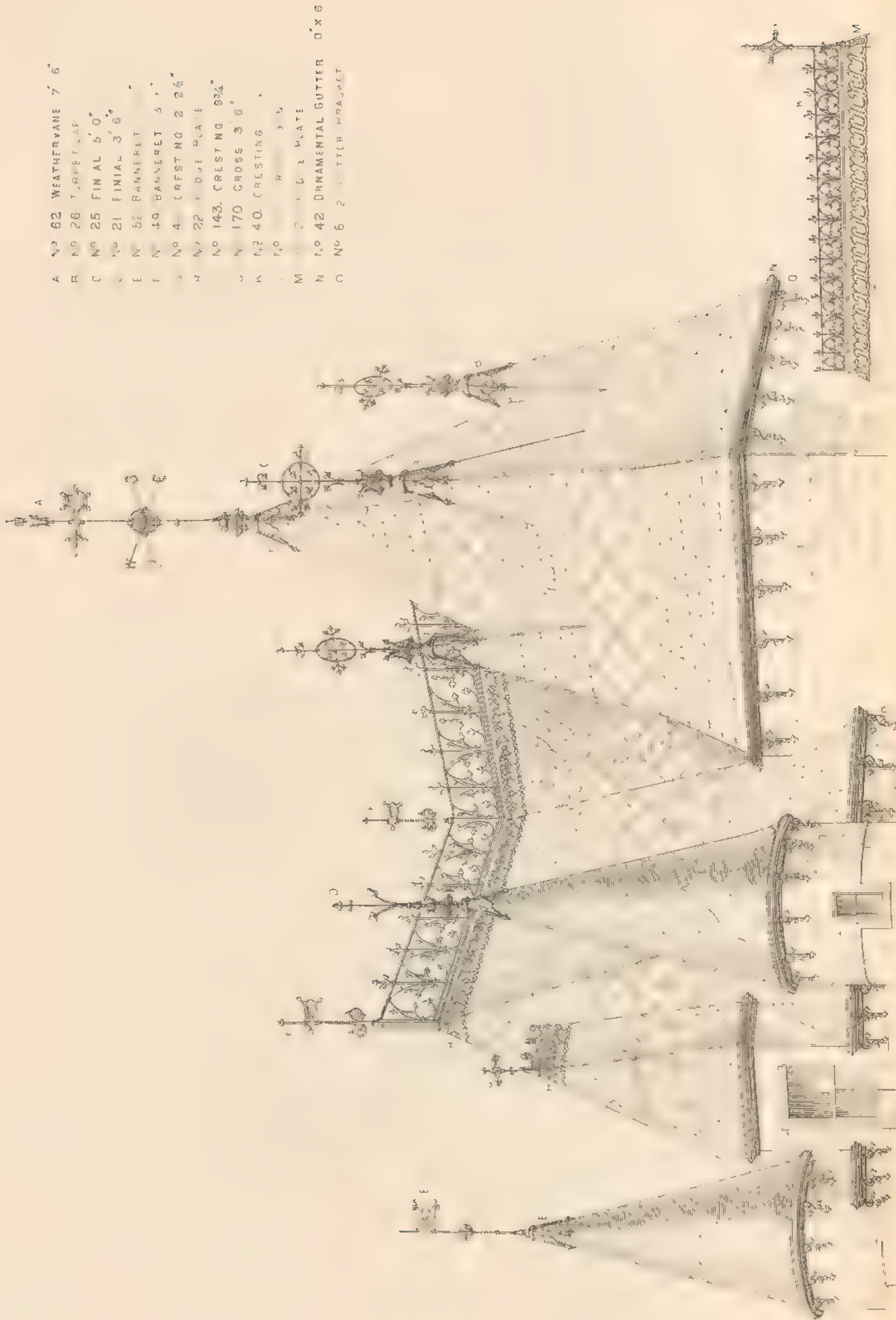


SCALE NCH = 1 FOOT



MACFARLANE'S TERMINALS & C

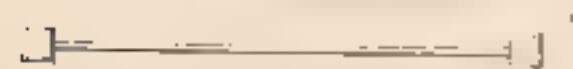
No 168



Nº 242

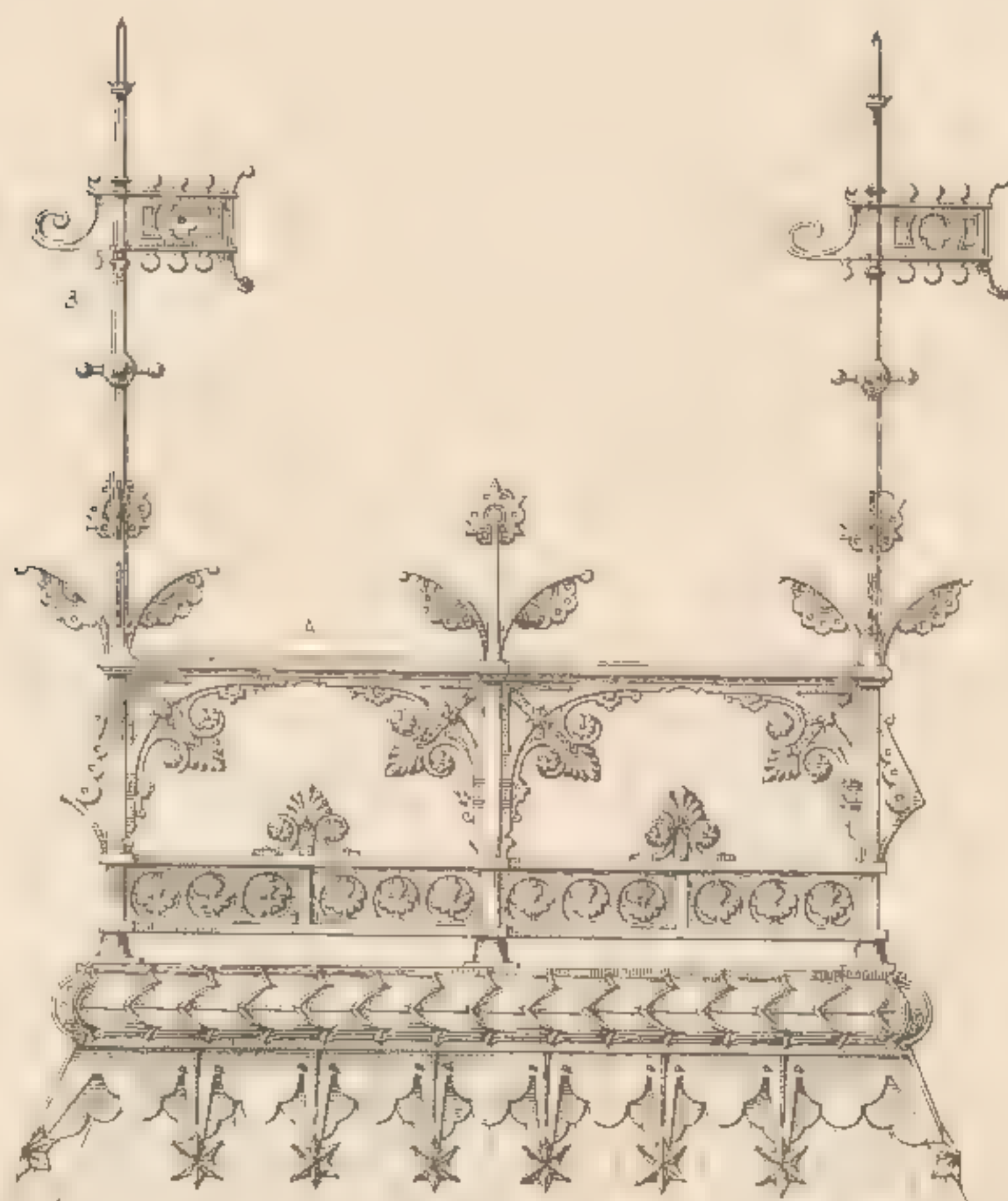
- A Nº 62. CRESTING 4' 0"
- B Nº 158 BANNERET 6' 3"
- C Nº 33 CURB PLATE
- D Nº 99 ORNAMENTAL FIGURED
GUTTER CORNICE 6' x 5 1/2"

PLAN AT CURB PLATE



9'

Any size to order.



SCALE 1/2" = 1 FOOT

MACFARLANE'S EXAMPLES.—Application of Ironwork to Roof.

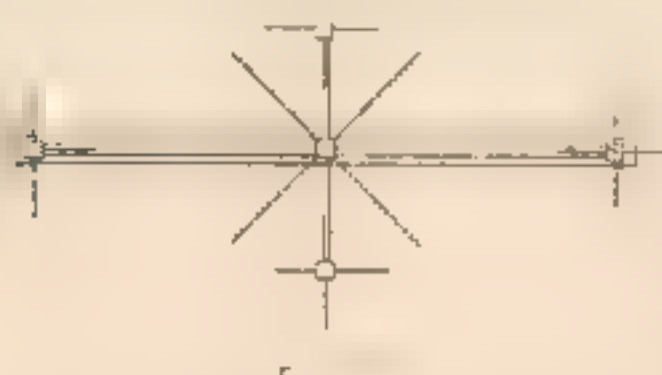
N- 259

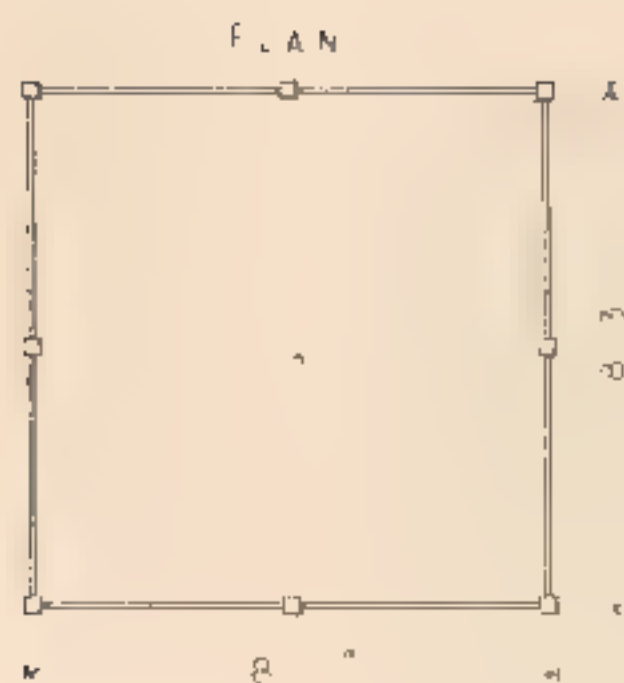


- A NO 207. WEATHERVANE 9 9
- NO 165 FIN AL 4 3
- NO 83 RAILING 2 4
- C NO 76 CRESTING 1
- E NO 22 RIDGE PLATE

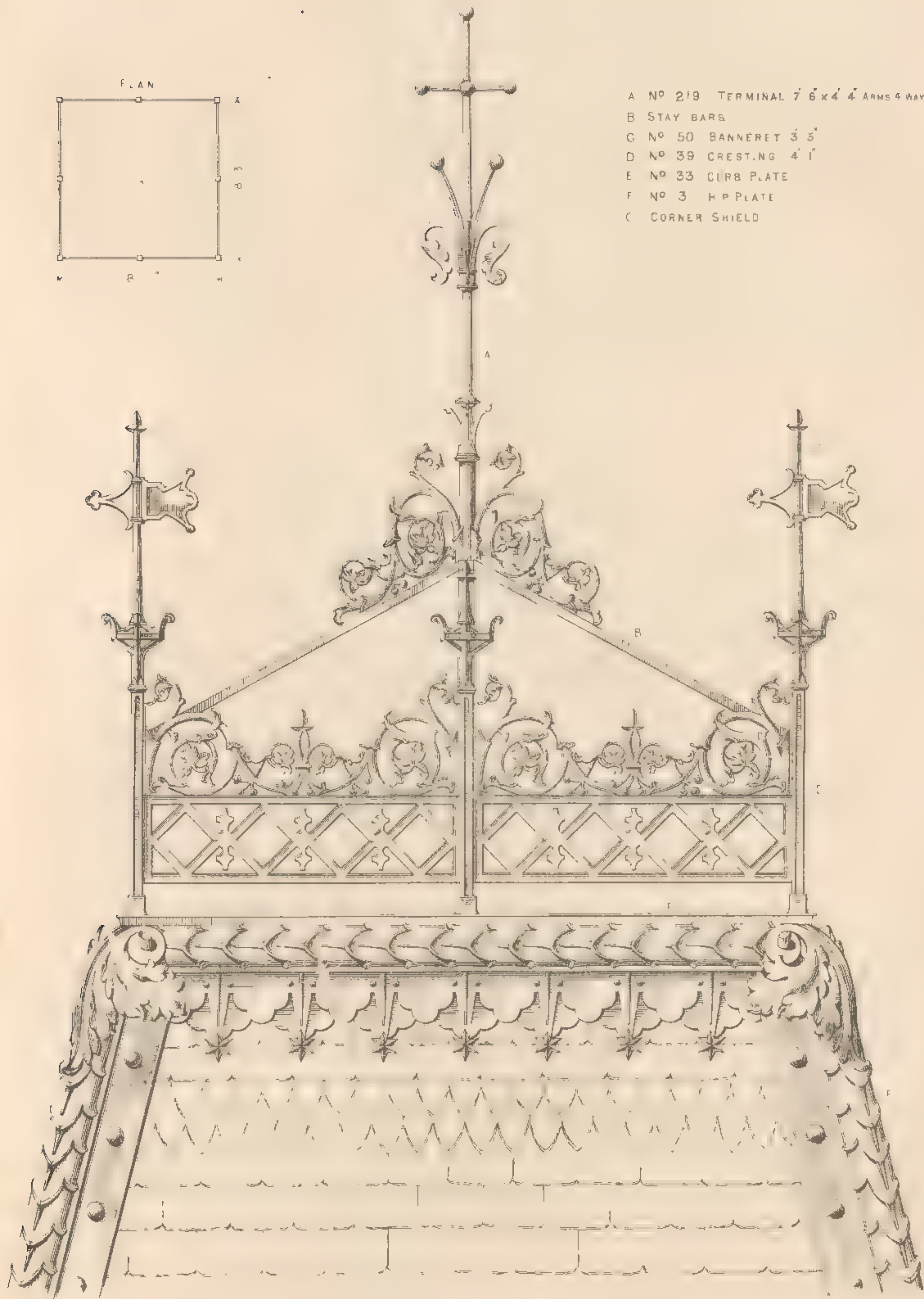
SCALE $\frac{3}{4}$ INCH = 1 FOOT

PLAN



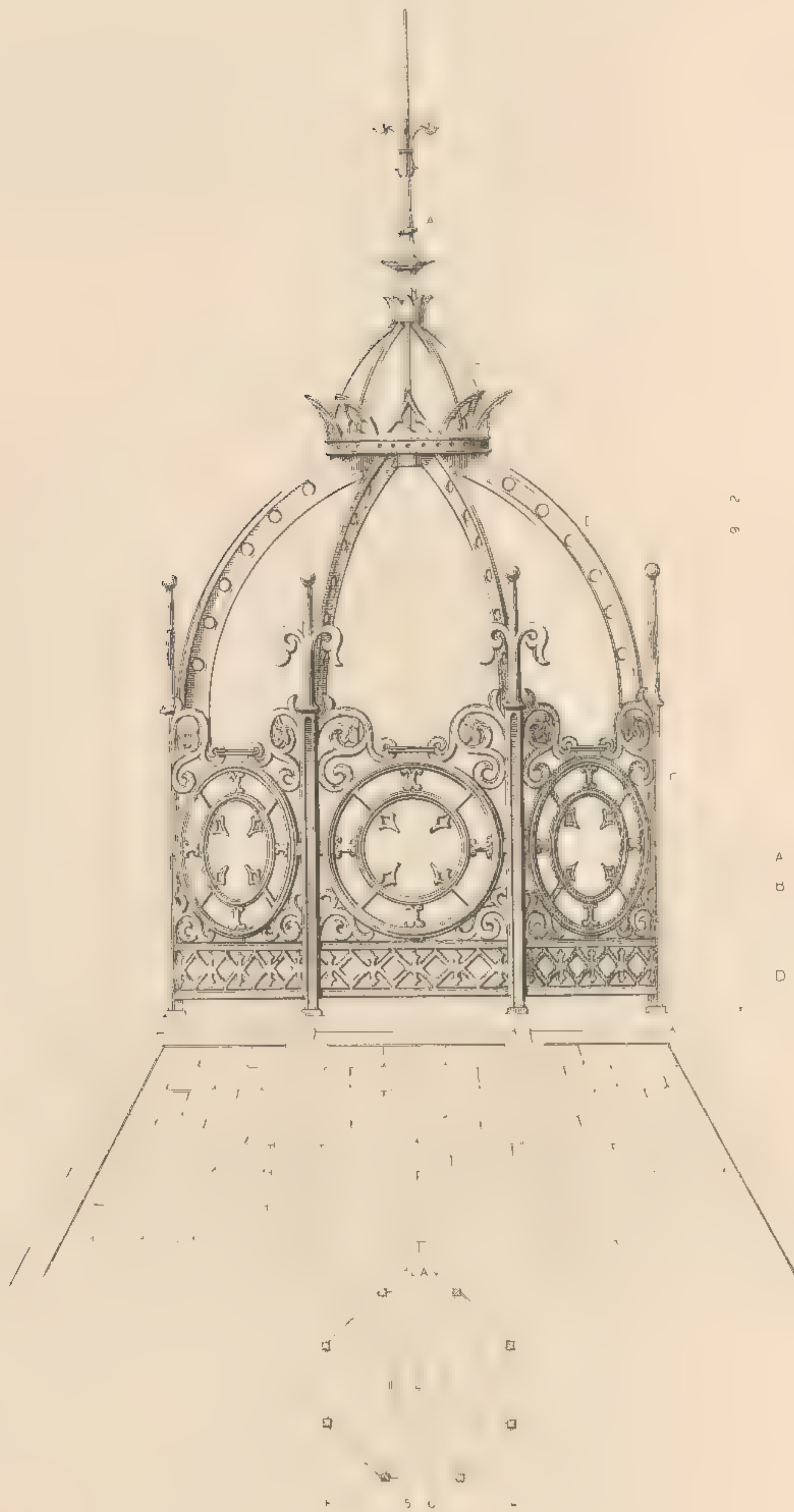


- A Nº 219 TERMINAL 7' 6" x 4' 4" ARMS 4 WAYS
- B STAY BARS
- C Nº 50 BANNERET 3' 5"
- D Nº 39 CRESTING 4' 1"
- E Nº 33 CURB PLATE
- F Nº 3 H.P. PLATE
- G CORNER SHIELD



SCALE $\frac{3}{4}$ INCH = 1 FOOT

Nº 257



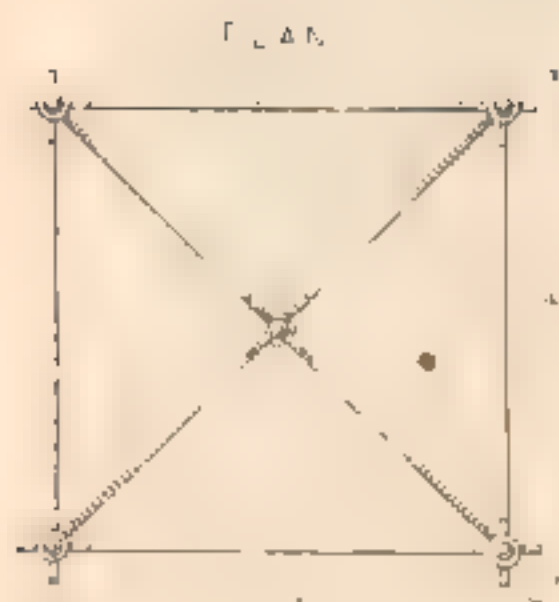
- A Nº 80 FINIAL 3' 0"
 B Nº 32 CROWNAL
 SEE Nº 32 FINIAL 5' 9"
 Nº 42 CRESTING 4' 4"
 D SPANDREL R B5

SCALE $\frac{3}{4}$ INCH = 1 FOOT

MACFARLANE'S EXAMPLES. Application of Terminals, Cresting, &c., to Tower.

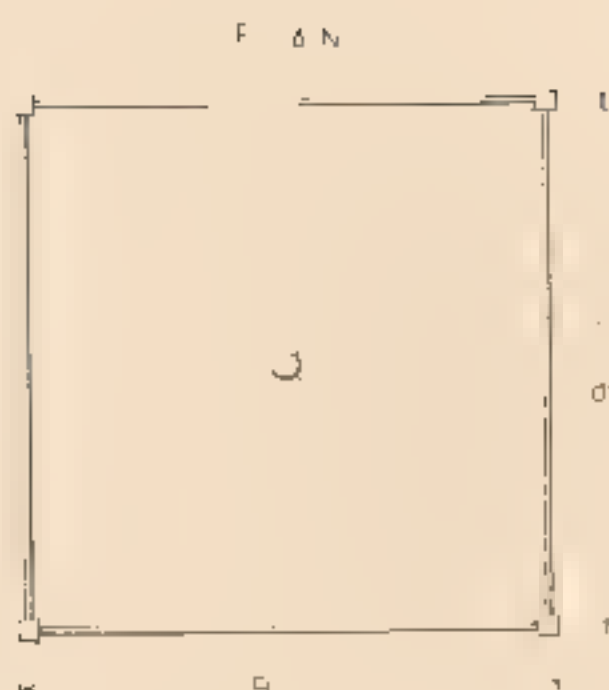
Nº 96

A Nº 84 CRESTING 3' 6"
 B Nº 125 FINIAL 1' 0"
 C SPANDRIL RBS WITH CROCKETS
 & CENTRE FIN A.

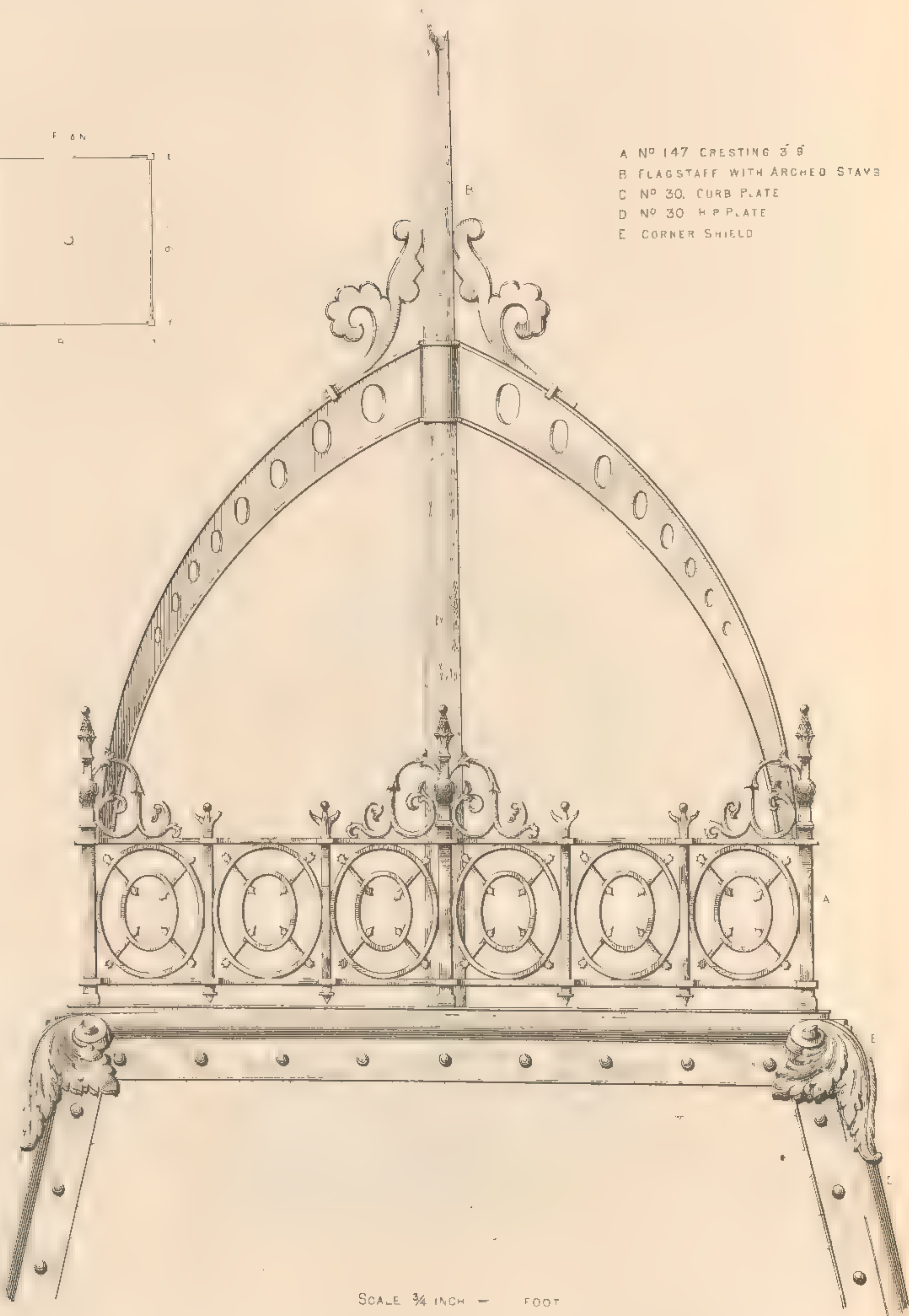


SCALE 1/8" = 1' FCO

No 8



- A NO 147 CRESTING 3' 9"
 B FLAGSTAFF WITH ARCHED STAYS
 C NO 30 CURB PLATE
 D NO 30 H P PLATE
 E CORNER SHIELD

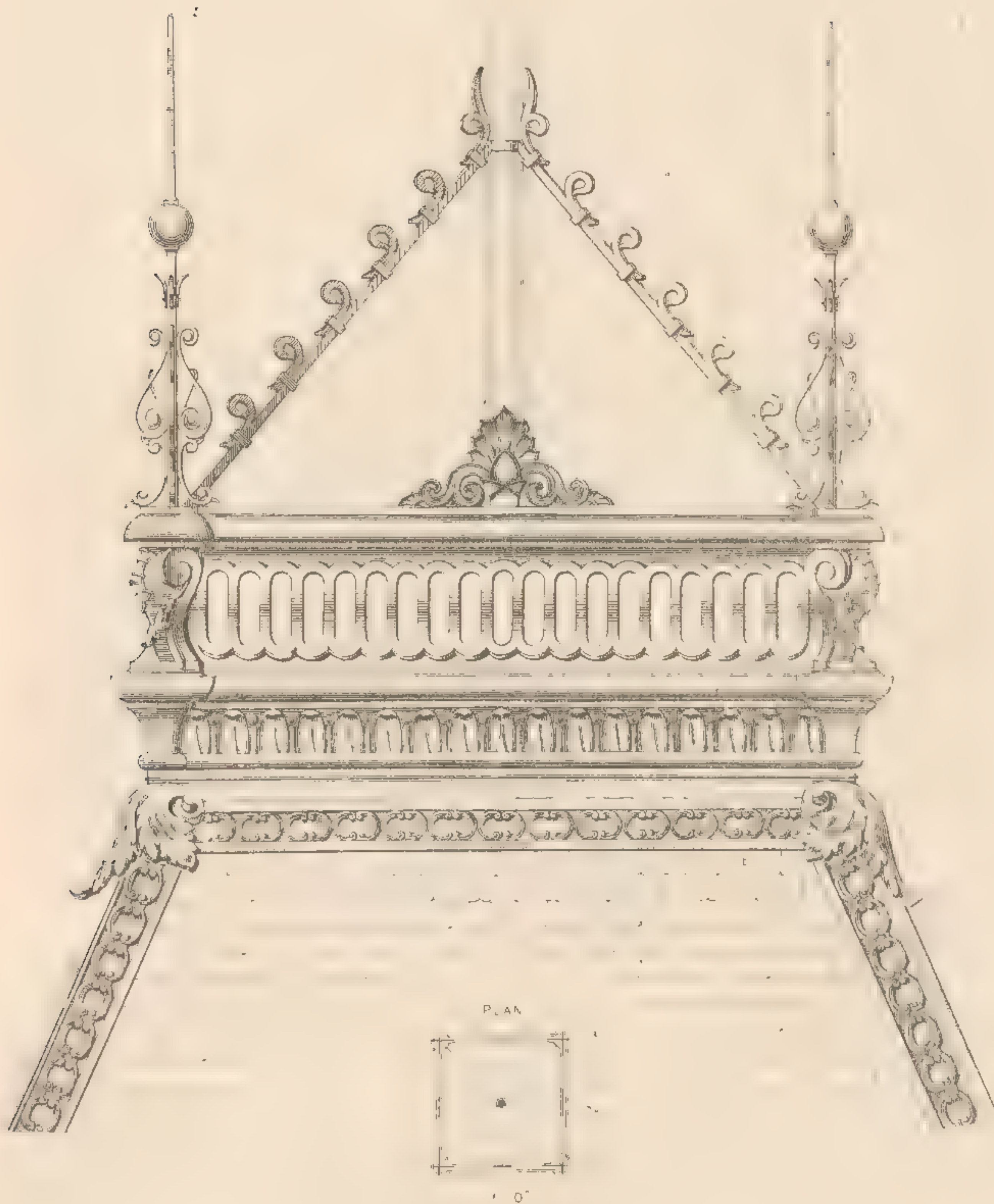


SCALE 3/4 INCH = FOOT

MACFARLANE'S EXAMPLES.—Application of Ironwork, Flagstaff, &c., to Mansard Roof

MACFARLANE'S TERMINALS &c

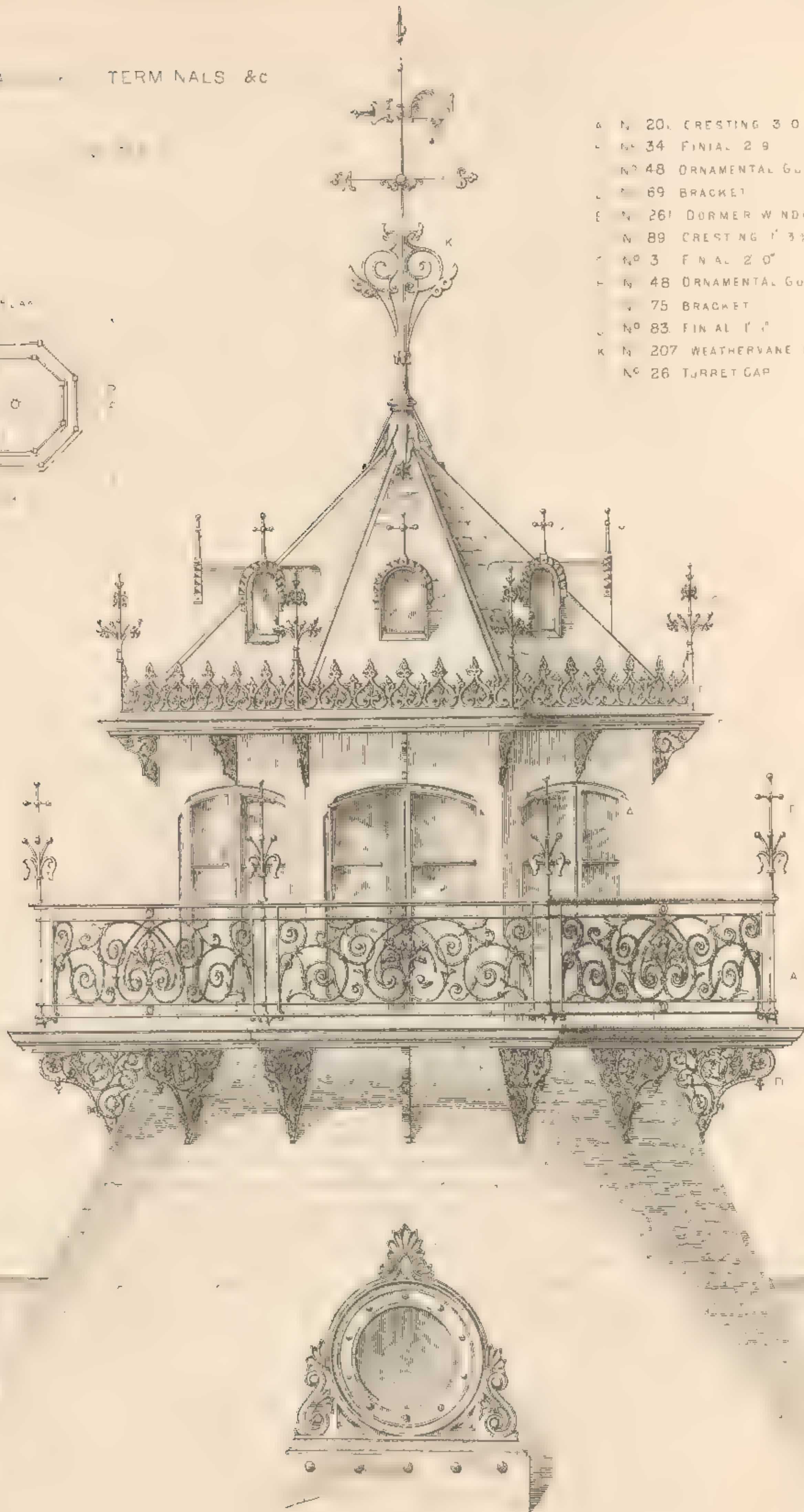
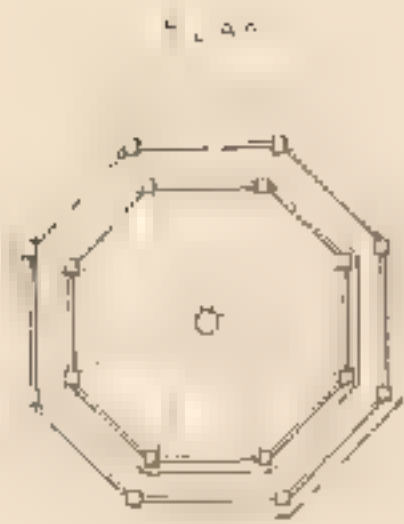
No 241



SCALE 1/2 INCH = 1 FOOT

MACFARLANE'S EXAMPLES.—Application of Ironwork, Flagstaff, &c., to Mansard Roof.

TERMINALS &c



- N 20. CRESTING 3 0
- N 34 FINIAL 2 9
- N 48 ORNAMENTAL GUTTER 1" x 6"
- N 69 BRACKET
- N 261 DORMER WINDOW
- N 89 CRESTING 1' 3 1/2"
- N 3 FINIAL 2 0"
- N 48 ORNAMENTAL GUTTER 7x5"
- N 75 BRACKET
- N 83 FINIAL 1' 1"
- N 207 WEATHERVANE 8 6"
- N 26 TURRET GAP

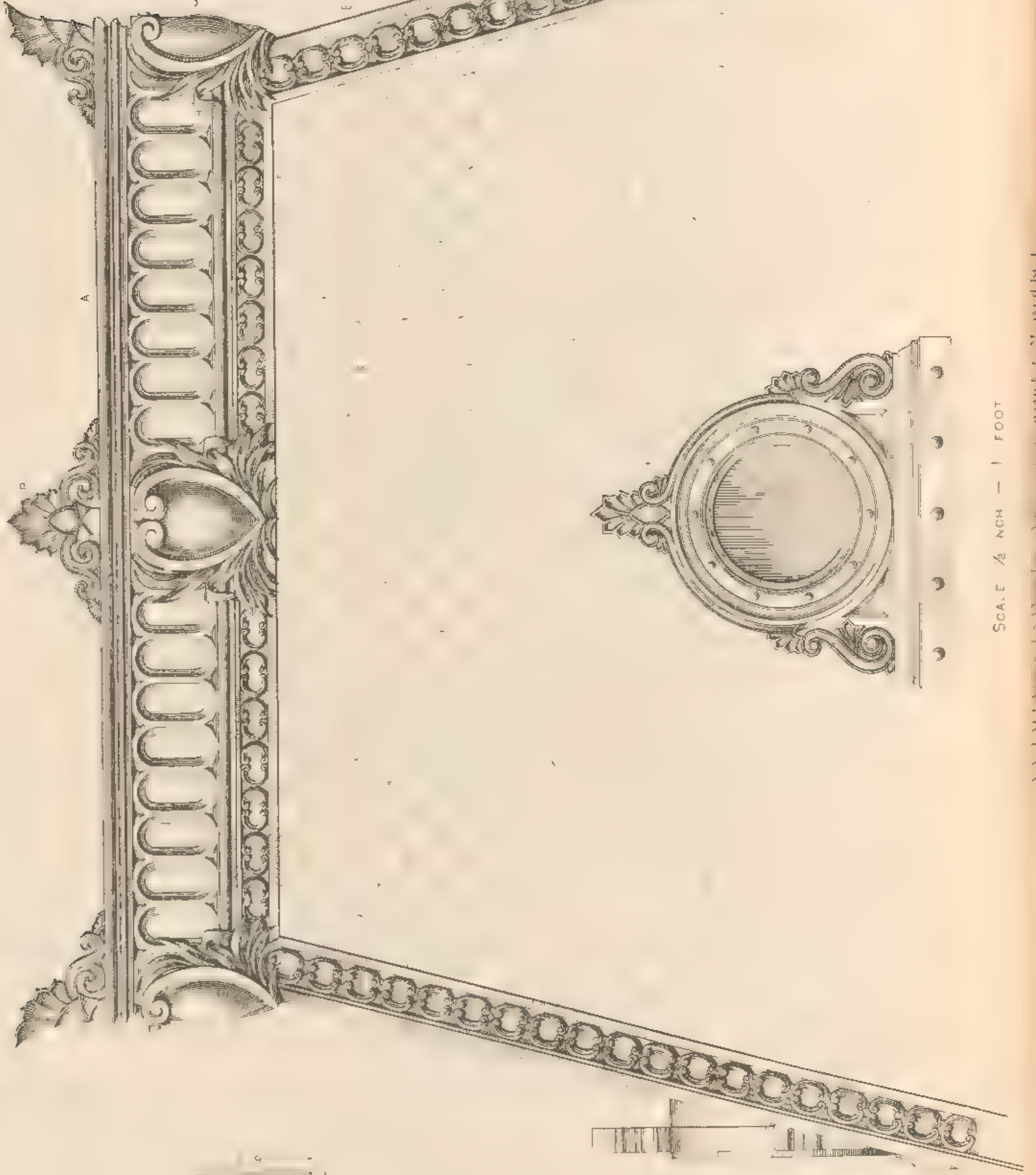
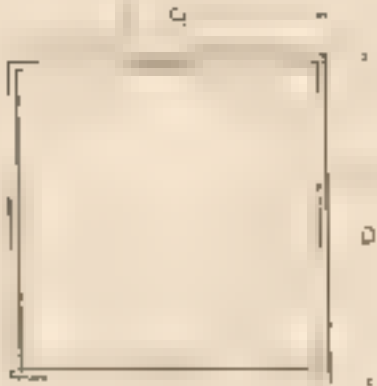
SCALE 3/4" = 1 FOOT

MACFARLANE'S EXAMPLES.—Application of Ironwork, to Roof.

MACFARLANE'S TERMINALS &c

No 45

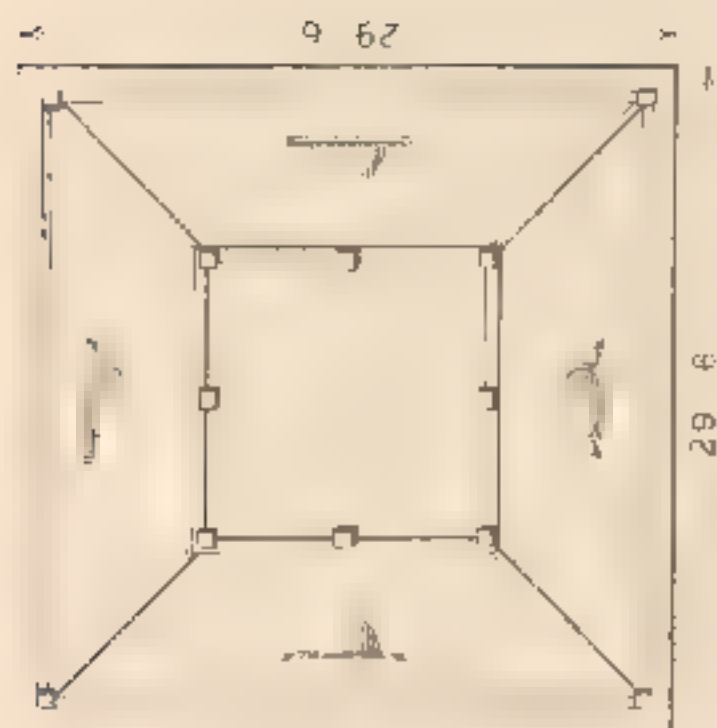
PLAN



- A No 204 CRESTING 2 0
- B No 45 TERMINAL 6
- C No 459 J.H.F.D
- D No 32 C.J.R.B. PLATE
- E No 32 HIP PLATE
- F No 26 DORMER WINDOW TERMINAL

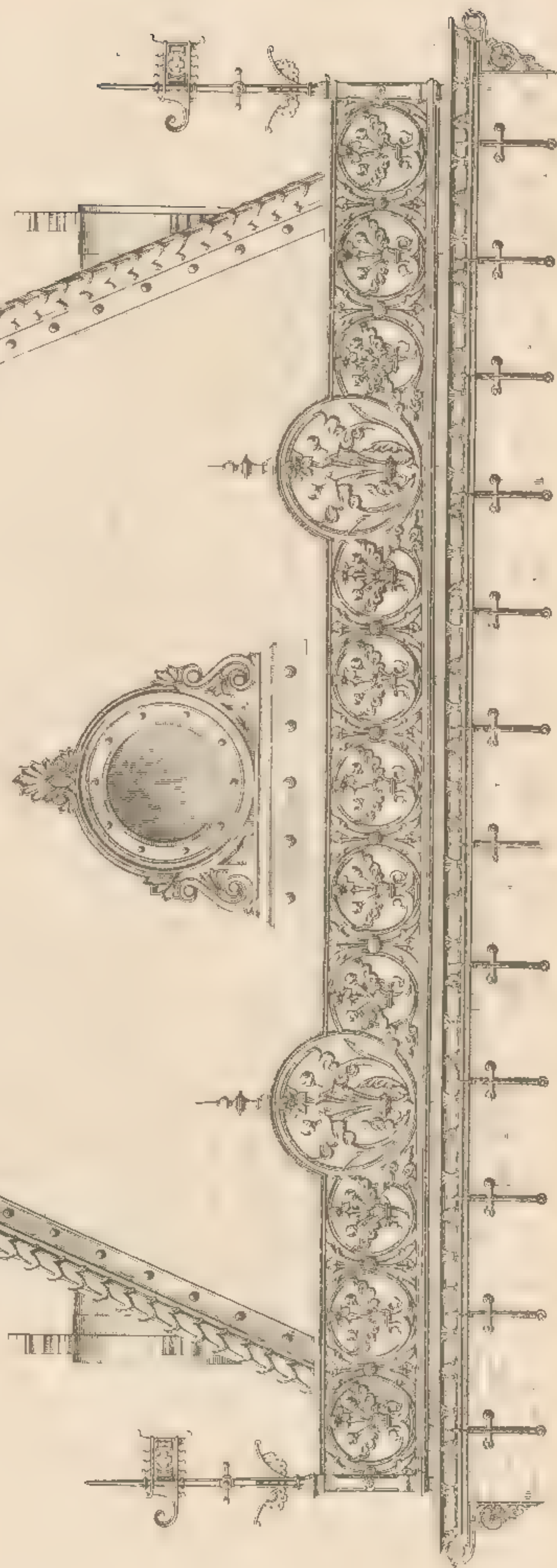
SCALE 1/2 INCH = 1 FOOT

PLAN

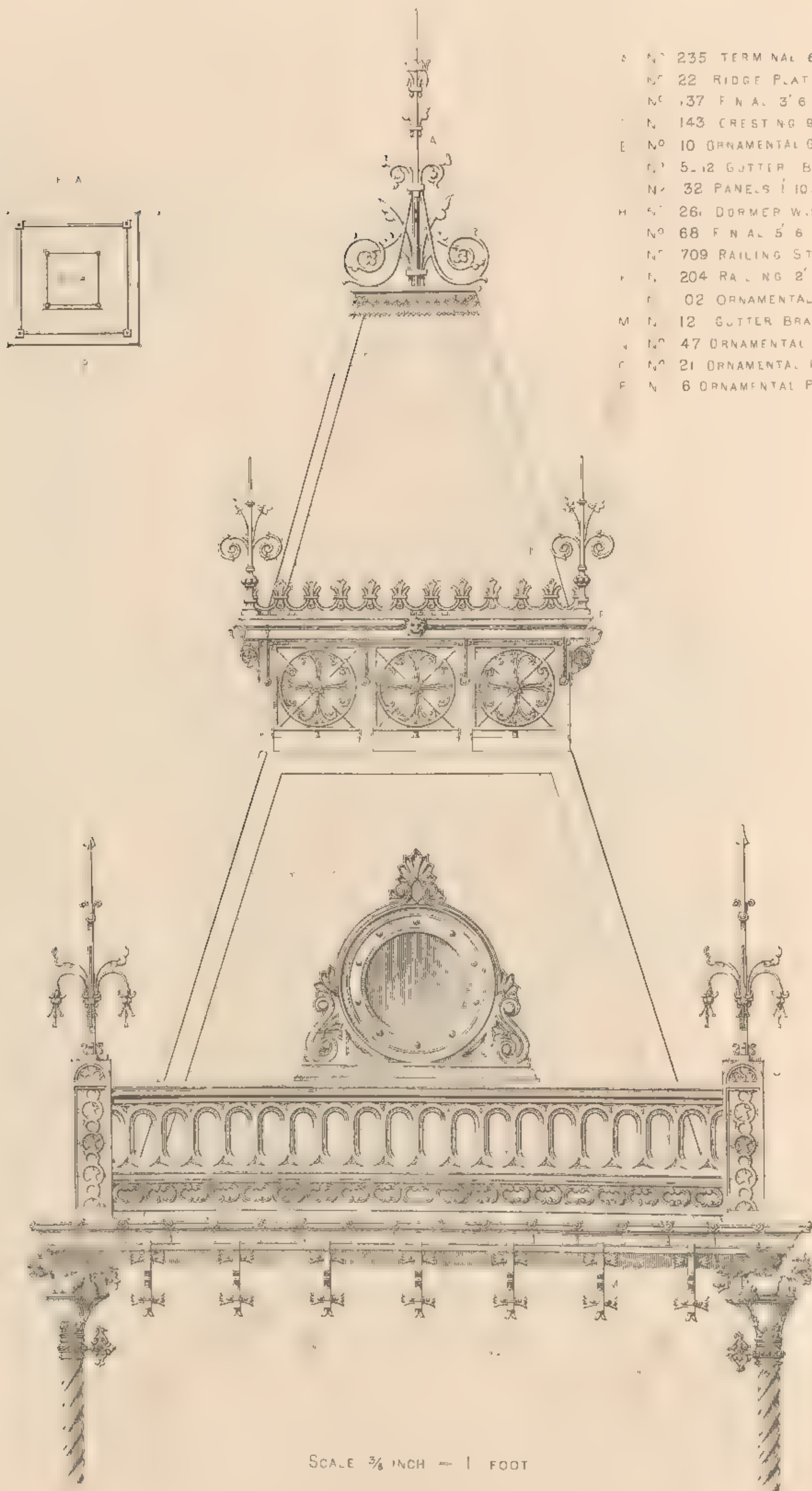


- A No 69 TERMINAL 6' 6" x 3' 0"
- B No 33 CURB PLATE
- C No 3 HIP PLATE
- D CORNER SHELF
- E No 261 DORMER WINDOW TERMINAL
- F No 158 BANNERET 4' 6"
- G No 149 RAILING 4' 5"
- H No 58 ORNAMENTAL FIGURED GUTTER - CORNICE 12" x 7"
- I No 58 BUTTER BRACKET

SCALE 3/4 INCH = FOOT



MACFARLANE'S PATENT. Application of Ironwork to Mansard Roof



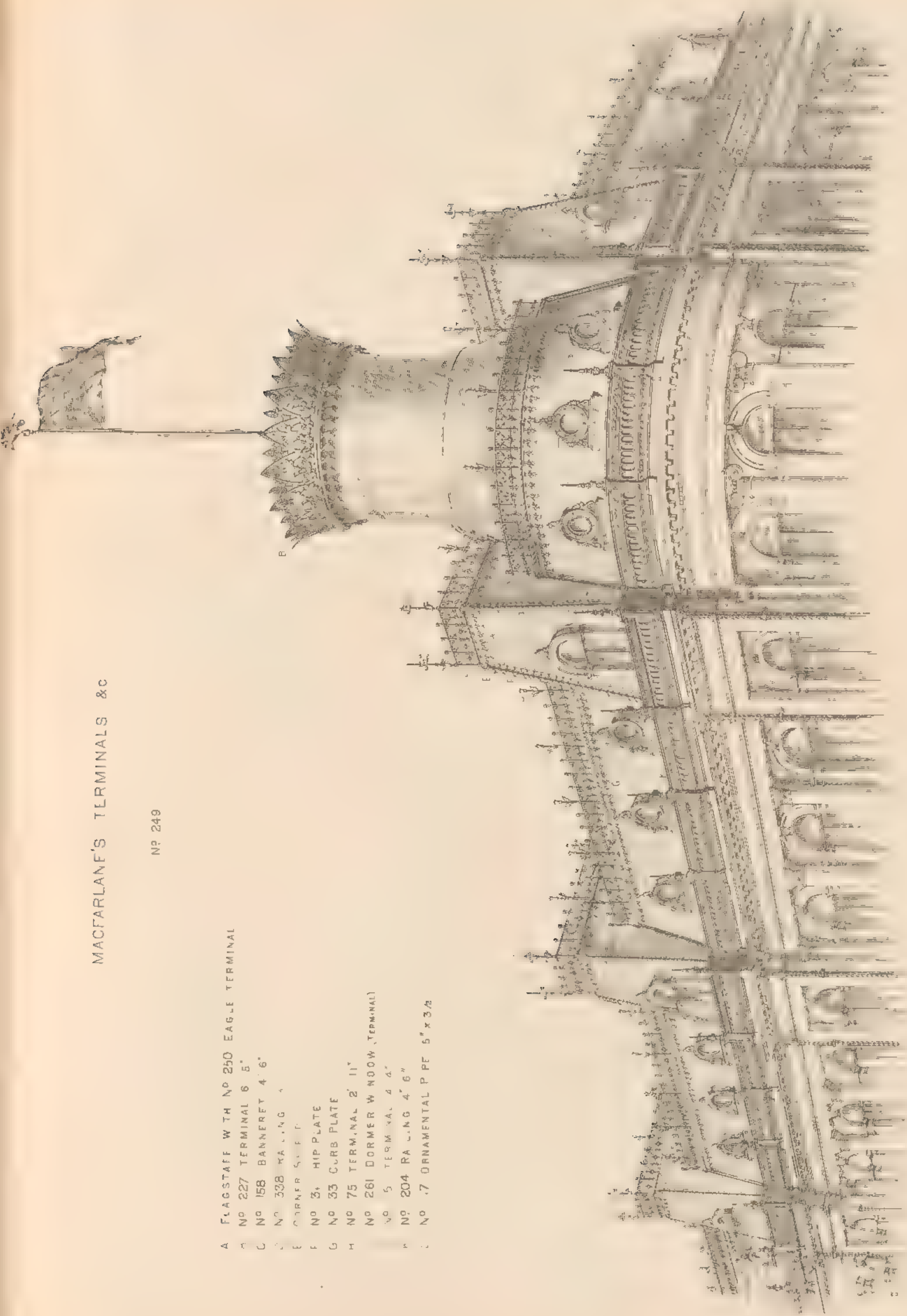
- N^o 235 TERMINAL 6 0
- N^o 22 RIDGE PLATE 8 x 8
- N^o 137 FINAL 3' 6
- N^o 143 CREST NO 9 3/4"
- N^o 10 ORNAMENTAL GUTTER 8 x 6 & LONS HEAD
- N^o 512 GUTTER BRACKET
- N^o 32 PANELS 10 1/2" x 10 1/2"
- N^o 26 DORMER WINDOW TERMINAL
- N^o 68 FINAL 5' 6
- N^o 709 RAILING STANDARD 3' 5 1/2" x 10 3/4"
- N^o 204 RAILING 2' 0"
- N^o 02 ORNAMENTAL FURRED GUTTER 0 1/2"
- N^o 12 GUTTER BRACKET
- N^o 47 ORNAMENTAL PIPE HEAD 6
- N^o 21 ORNAMENTAL PIPE EAR
- N^o 6 ORNAMENTAL PIPE 6 x 4"

SCALE 3/8 INCH = 1 FOOT

MACFARLANE'S TERMINALS &C

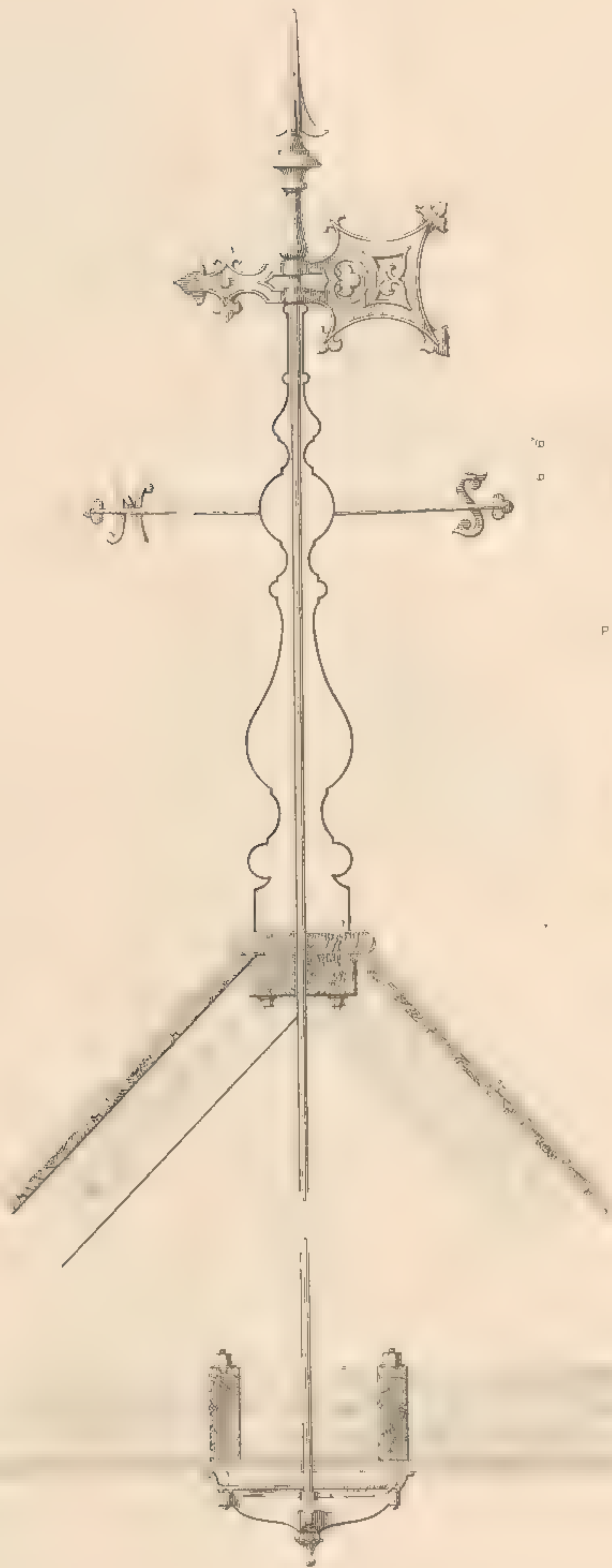
Nº 249

- A FLAGSTAFF WITH Nº 250 EAGLE TERMINAL
- B Nº 227 TERMINAL 6' 5"
- C Nº 158 BANNERET 4' 6"
- D Nº 338 RAILING
- E CORNER SLEEP
- F Nº 34 HIP PLATE
- G Nº 33 CURB PLATE
- H Nº 75 TERMINAL 2' 11"
- I Nº 261 DORMER WINDOW (TERMINAL)
- J Nº 5 TERMINAL 4' 4"
- K Nº 204 RAILING 4' 6"
- L Nº 7 ORNAMENTAL PIPE 5" x 3/4"



SCALE 1/10 INCH = 1 FOOT

MACFARLANE'S EXAMPLES.—Application of Ironwork, to Roof.



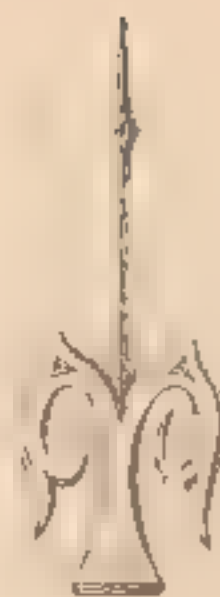
PLAN OF INDICATOR ON CEILING

SCALE 1 INCH = FOOT

MACFARLANE'S EXAMPLES. Application of Weather vane with Indicator, showing in the interior of apartment the direction of the wind.
See No. 59 Weather vane, page 185

MACFARLANE'S TERMINALS &c

No 178



No 280



No 276



No 275



No 209

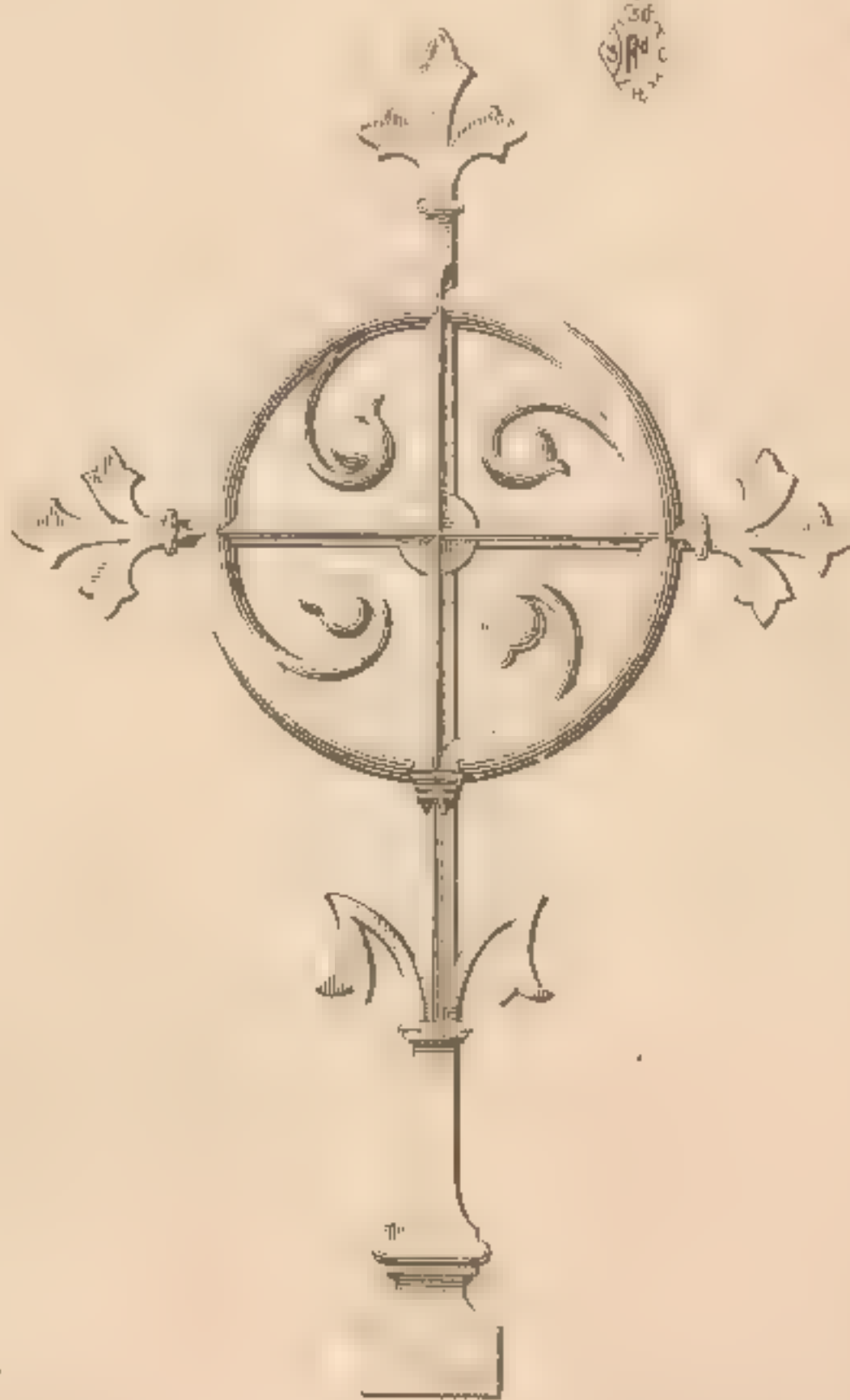


No 149

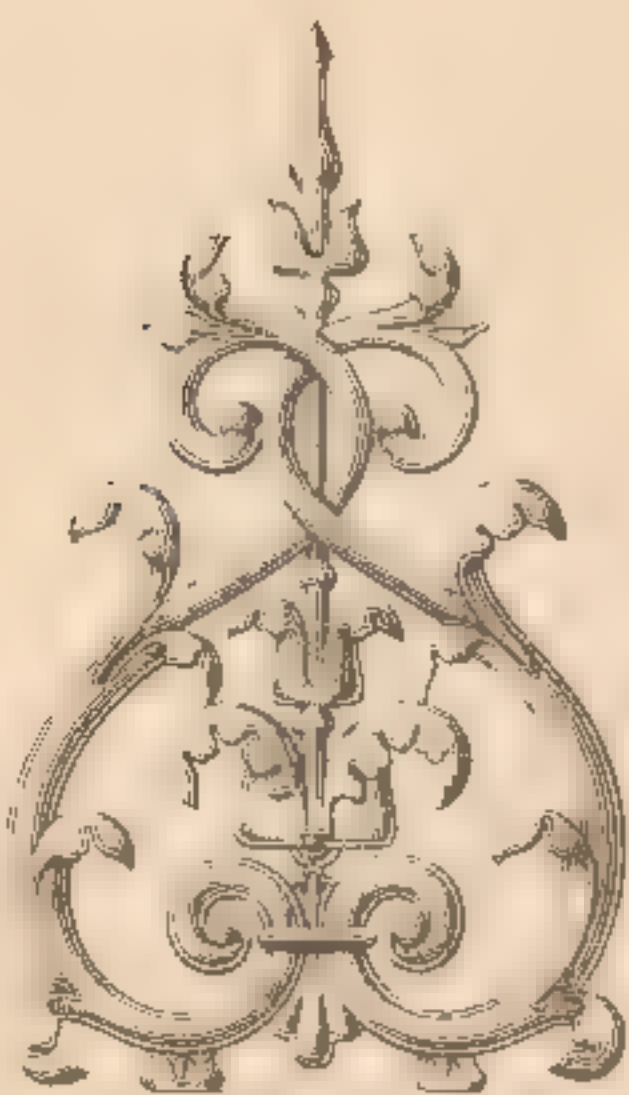


ARMS 2 AND 4 WAYS ARMS 2 AND 4 WAYS

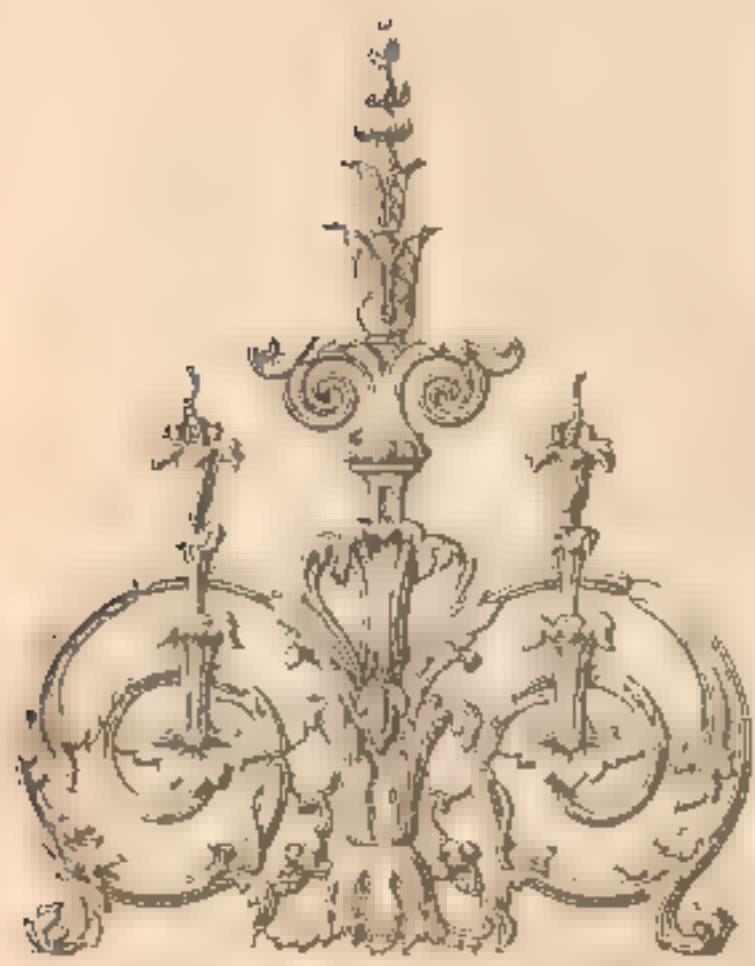
No 244



No 279



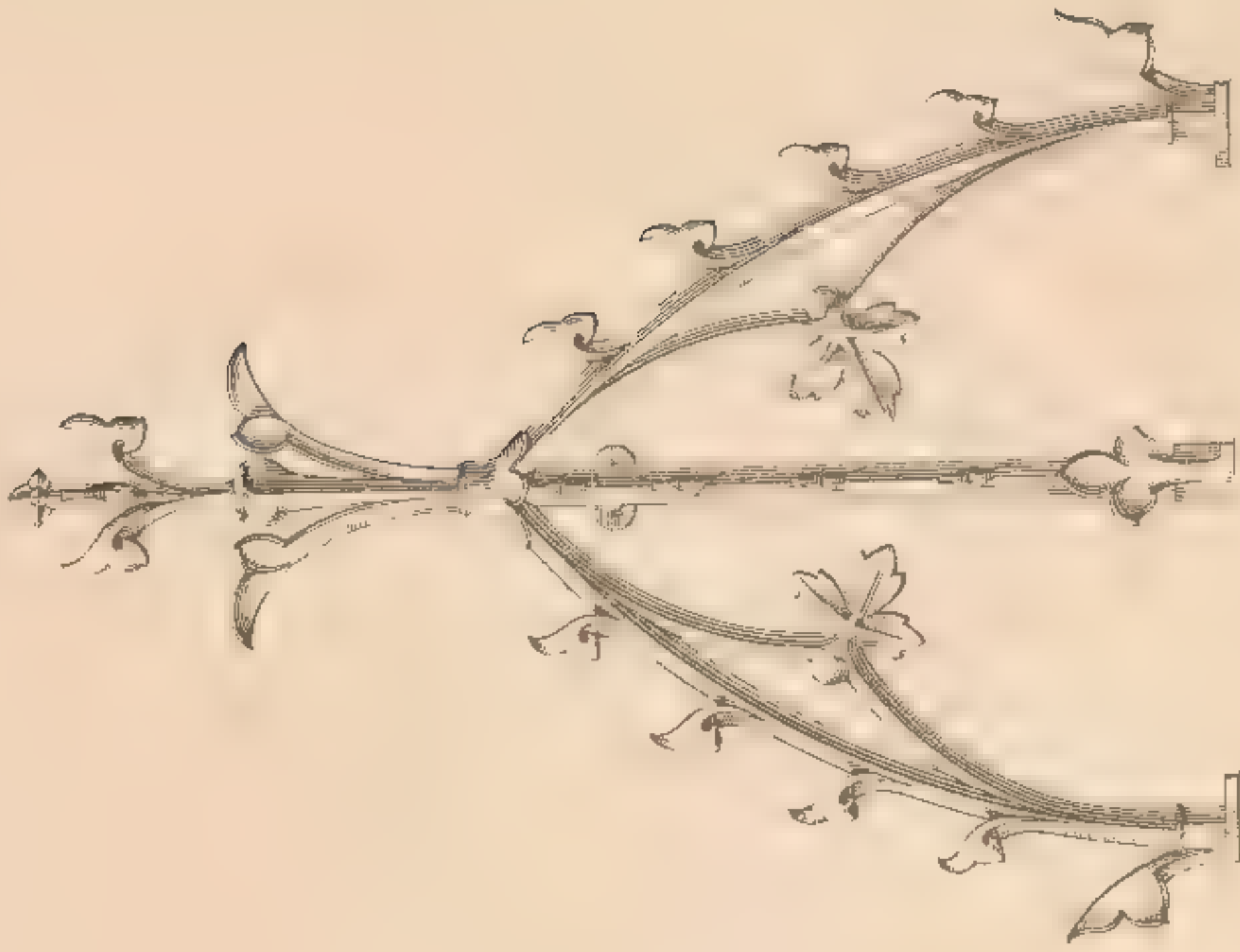
No 280



SCALE 1 INCH = FOOT

MACFARLANE'S TERMINALS & C

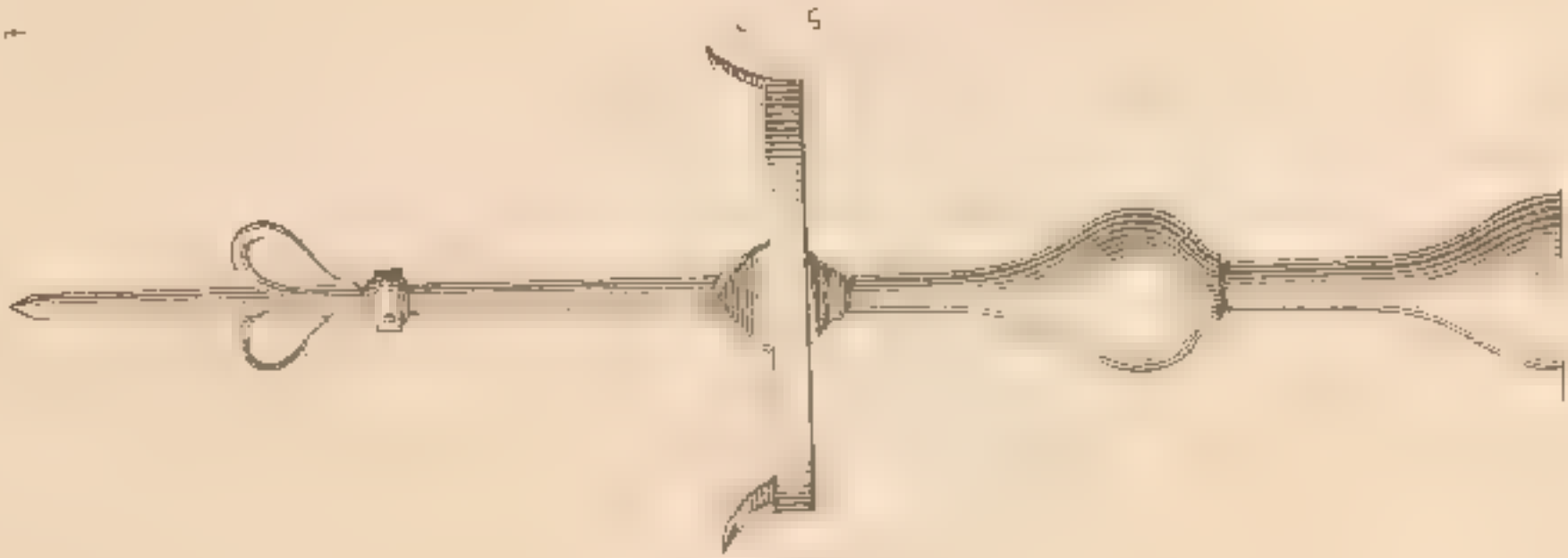
1,2 275



5 204



24



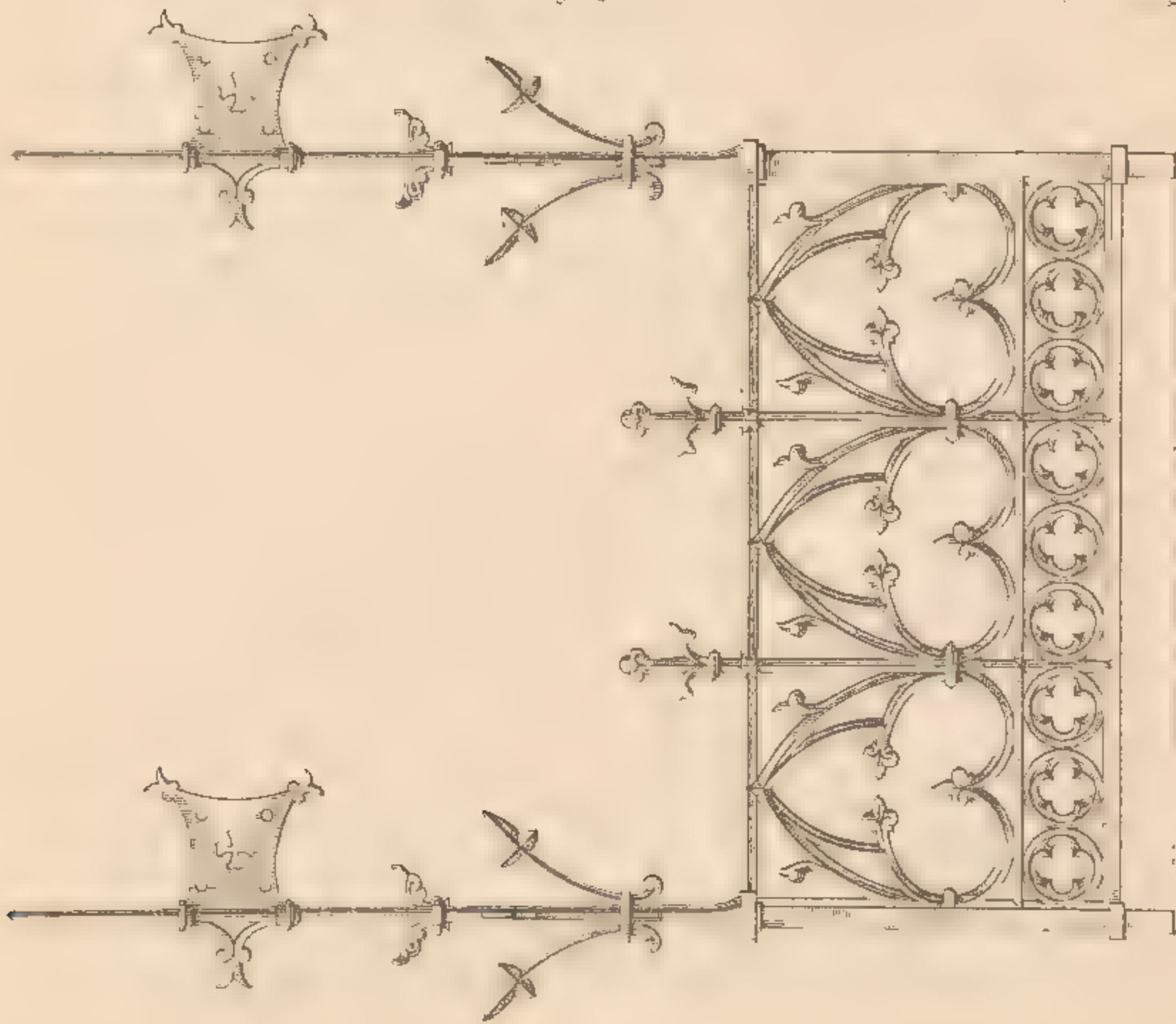
5 181



Bottom scrolls 2 and 4 ways, and can be made to any required bevel.

SCALE 1 INCH = FOOT

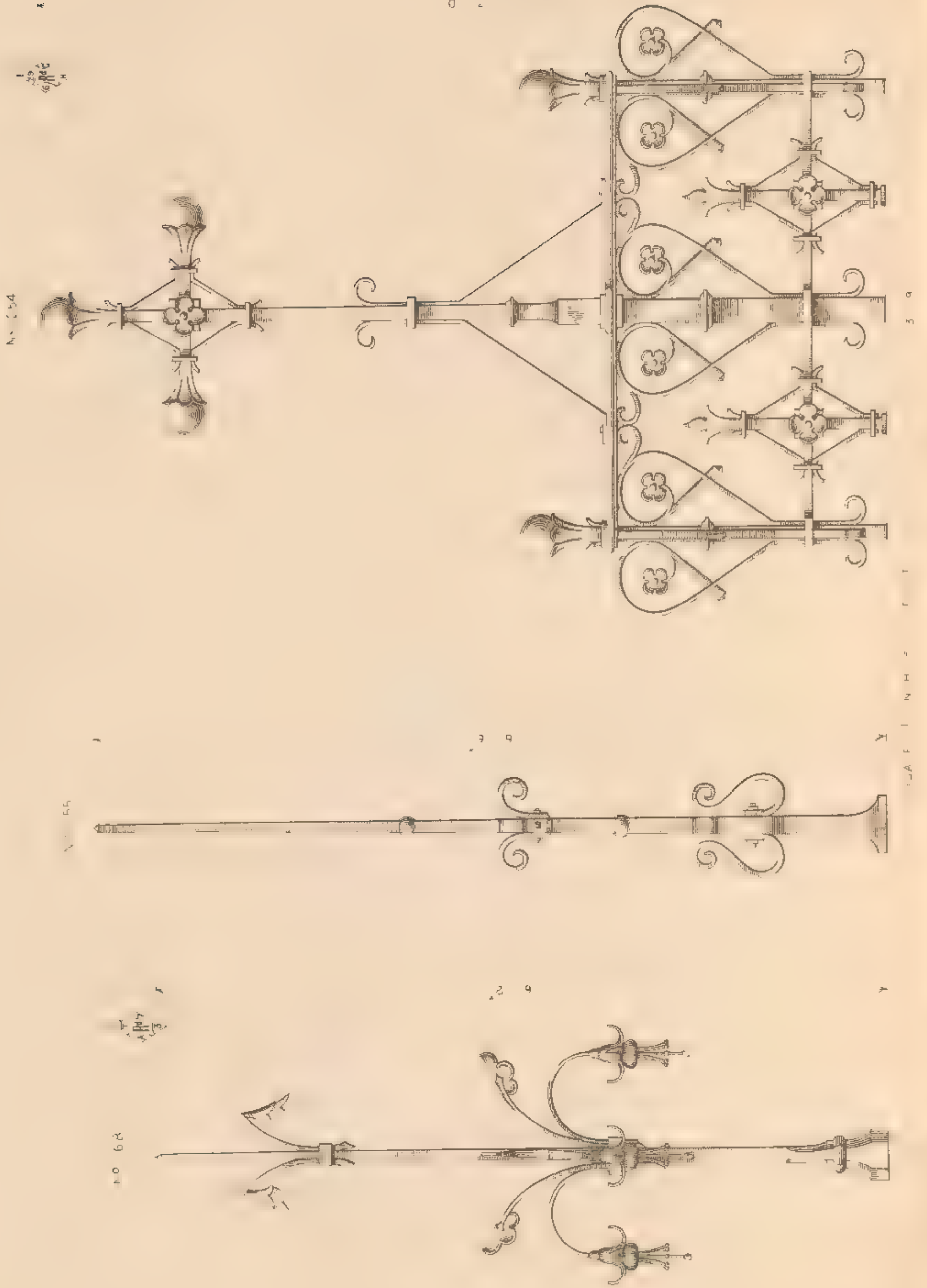
MACFARLANE'S TERMINALS &c

N^o 253N^o 252

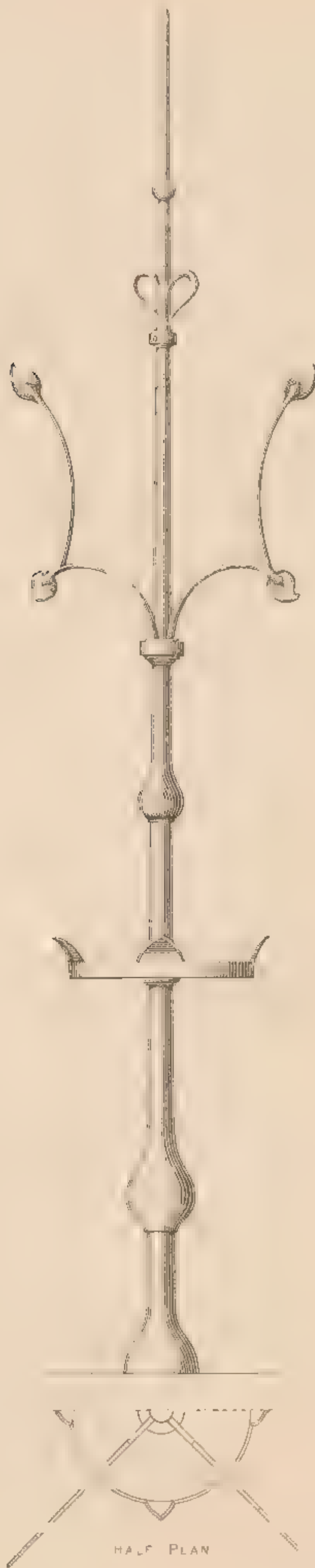
These can be supplied for either wedge or Mansard Roofs, also other sizes *to order*.

SCALE 1 INCH = 1 FOOT

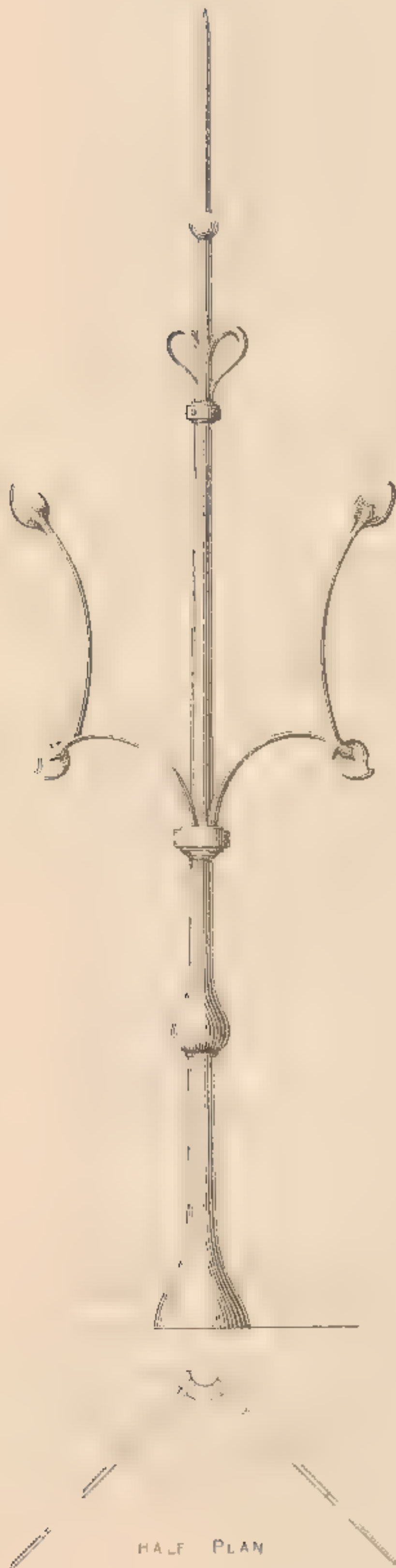
MACFARLANES TERMINALS &c



Nº 84



Nº 184



7' 6

SCALE 1 INCH = 1 FOOT

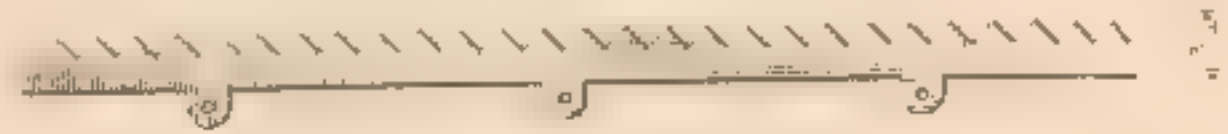
SECTION V. RAILING.

MACFARLANE'S RAILING CRESTING & BALCONES, FRIEZE ALTAR, SCREEN, GALLERY FRONT & TOMB RAILS, GRILLES, WINDOW GUARDS DR P FRIEZES &C FOR EVERY KIND OF FENCING, ROOF, WALL AND BUILDING DECORATION VENTILATION &C

No 465



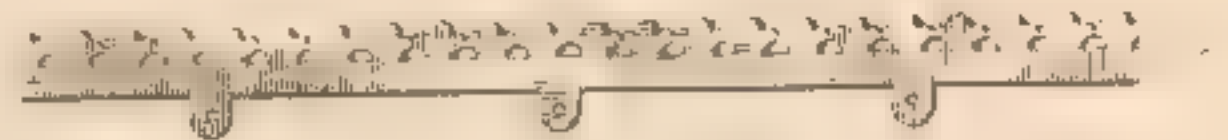
No 366



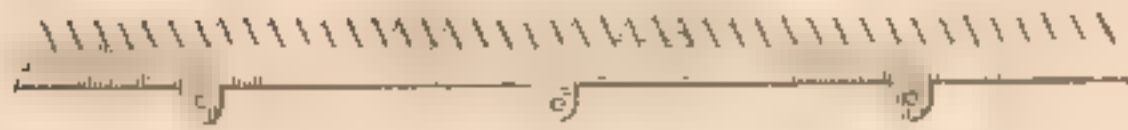
No 4



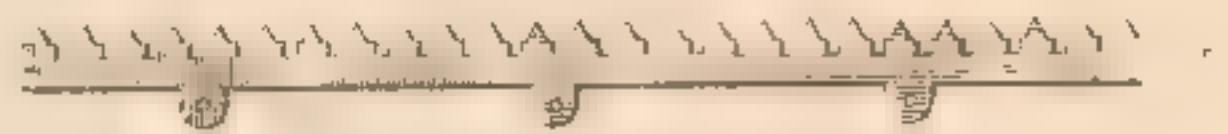
No 44



No 368



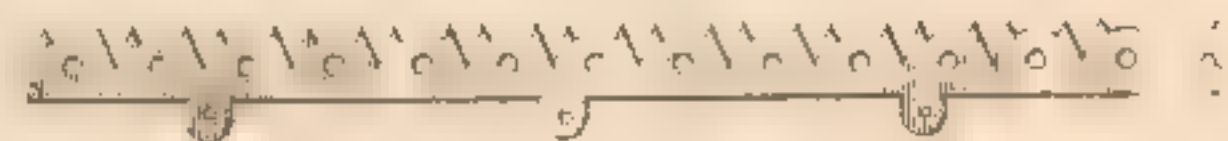
No 445



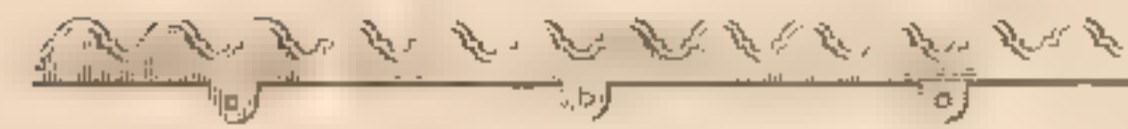
No 448



No 456



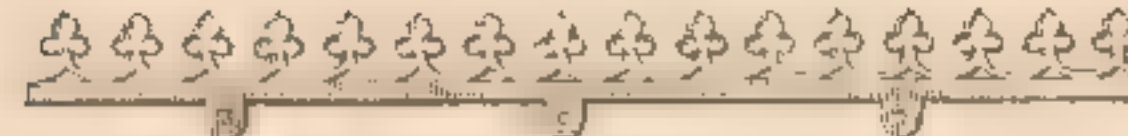
No 447



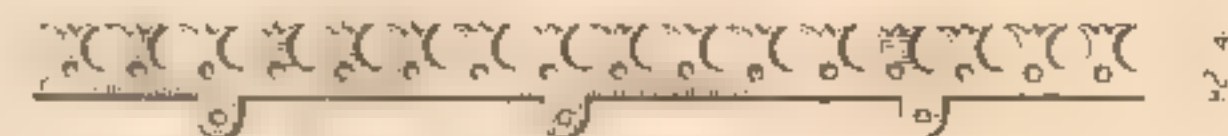
No 450



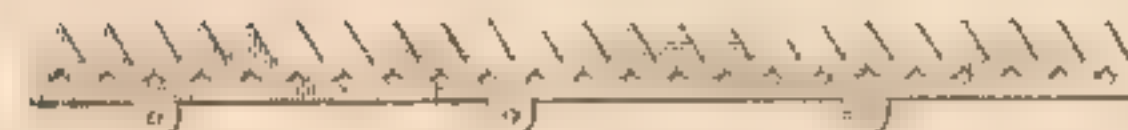
No 446



No 452



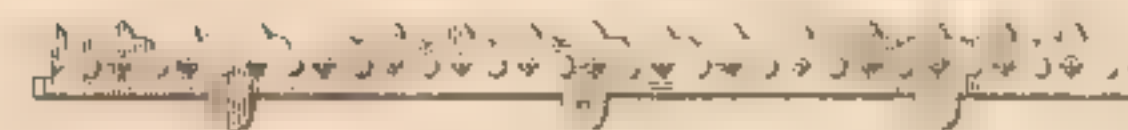
No 449



No 454



No 449



No 455



No 451



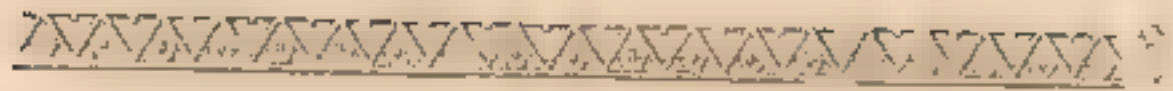
No 45



SCALE INCH = 1 FOOT

MACFARLANE'S RAILING & CO

Nº 289

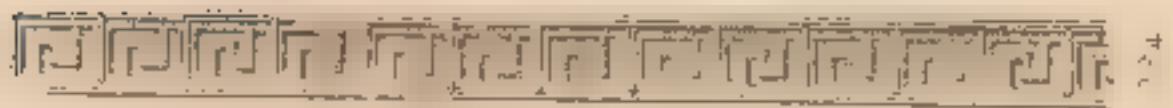


1 2 F 3



One face

Nº 289

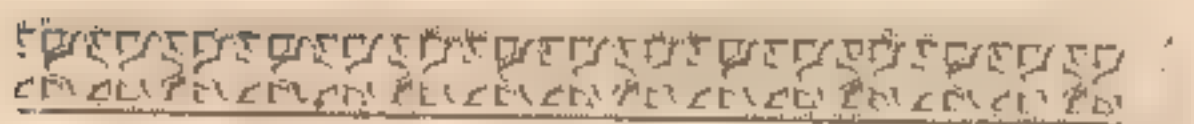


One face

Nº 289



Nº 399

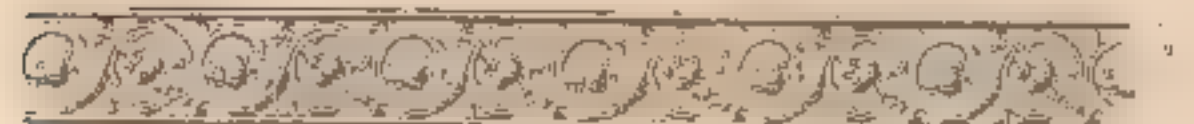


1 5



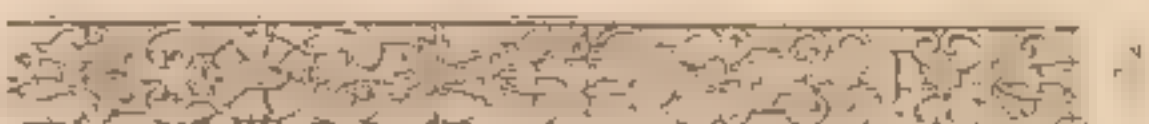
One face

Nº 371



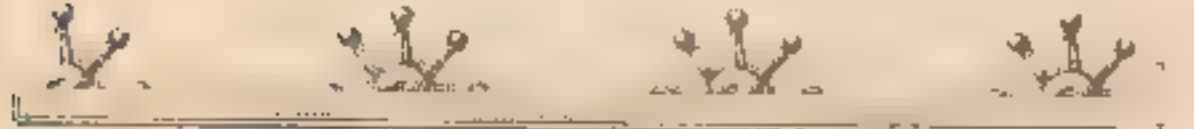
One face

Nº 227

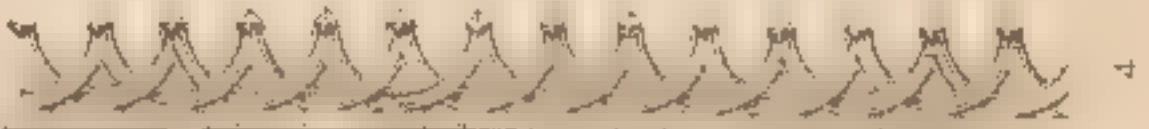


One face

Nº 183



4 3



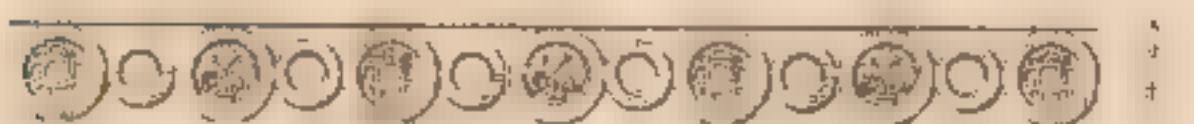
Nº 463



Nº 249



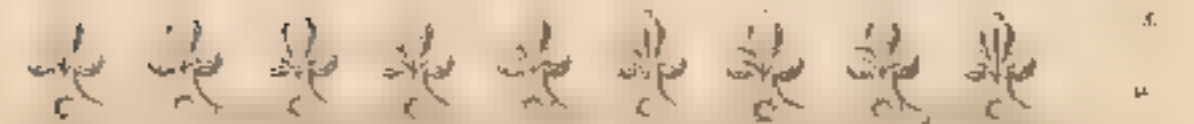
Nº 267



Nº 86



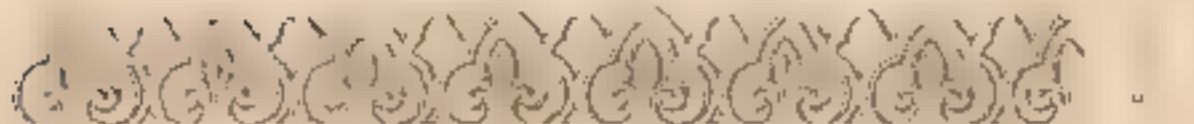
Nº 86



Nº 56



Nº 56



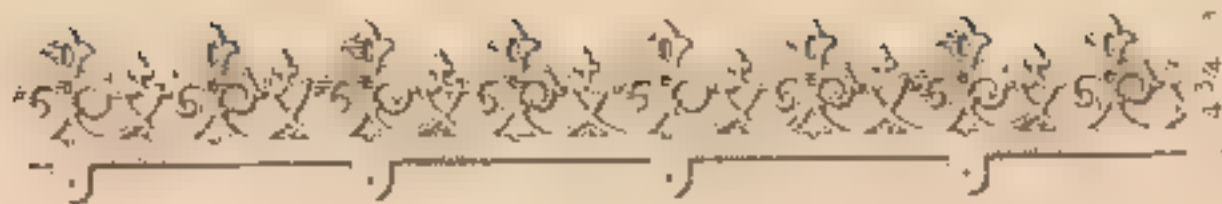
Nº 56



SCALE 1 INCH = FOOT

MACFARLANE'S RAILING & C

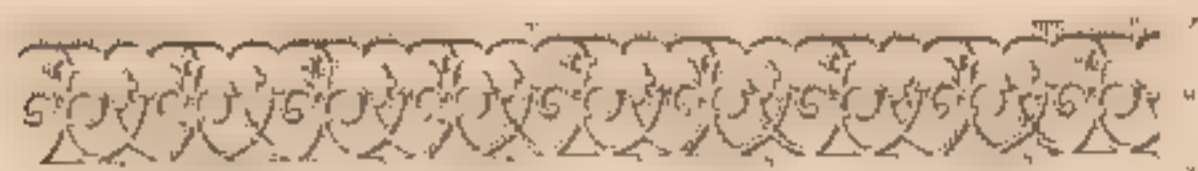
N° 38



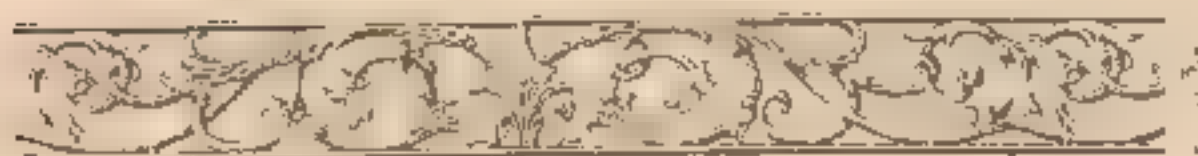
N° 290



N° 38



N° 47



N° 242



N° 55



One face

N° 368



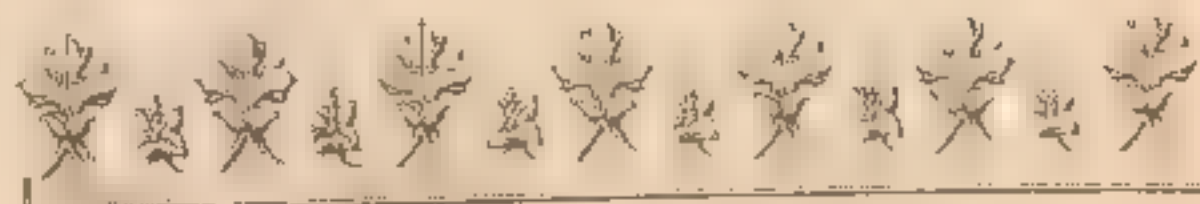
One face

N° 85

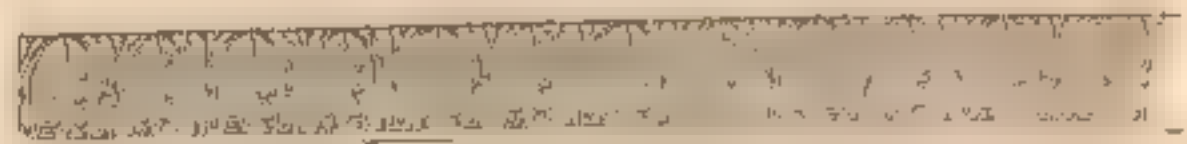


One face

N°



N° 285

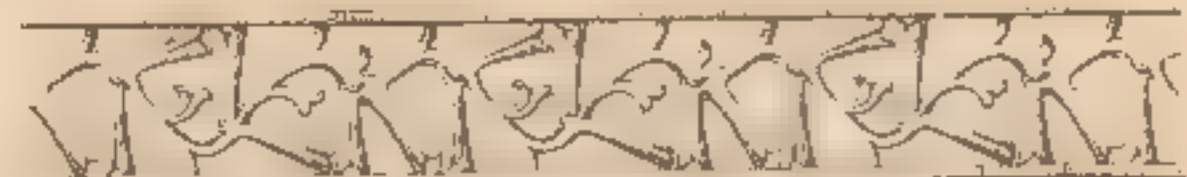


One face

N° 5

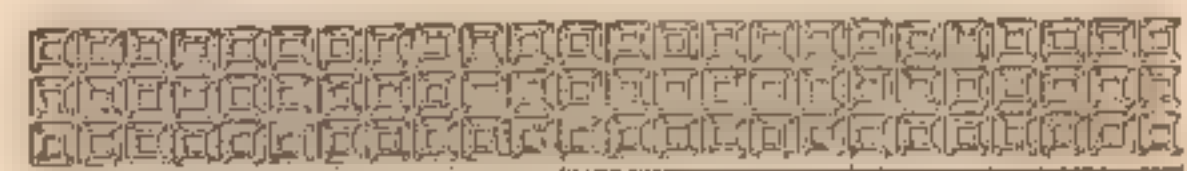


N° 227

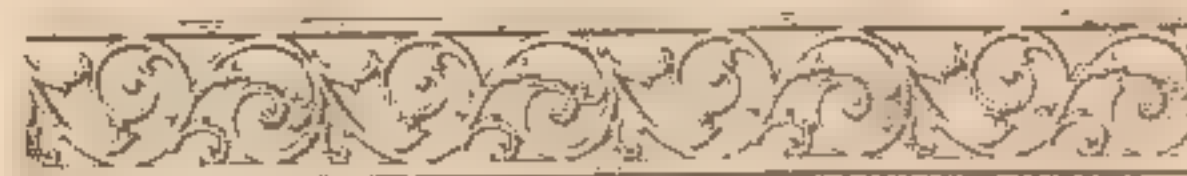


One face

N° 344



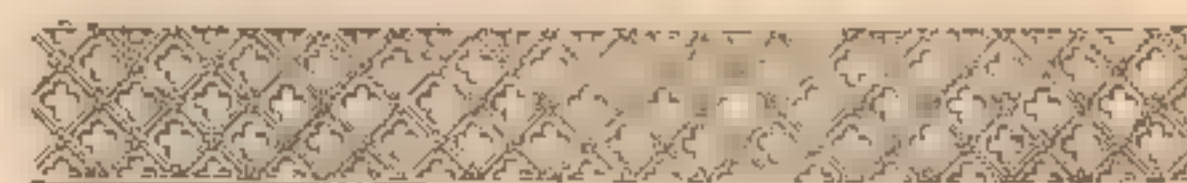
N° 31



N° 56

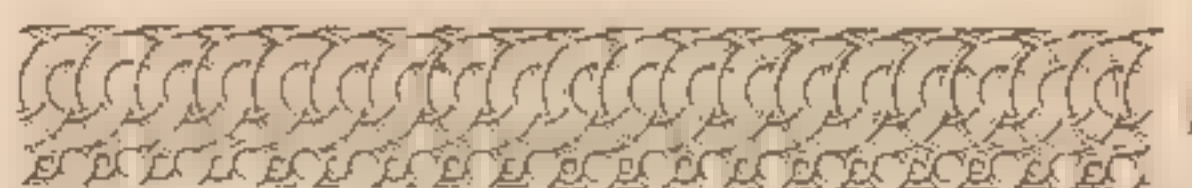


N° 1



SCALE 1 INCH = FOOT

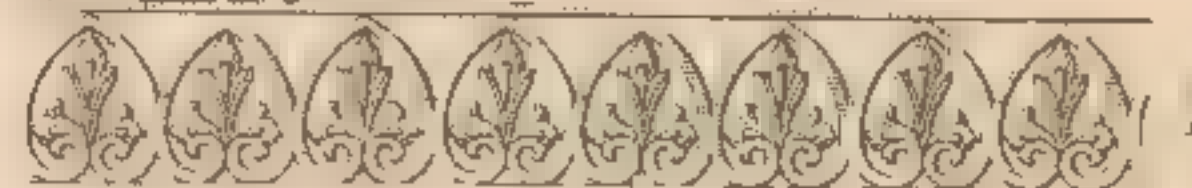
MACFARLANE'S RAILING &C

N^o 1N^o 183N^o 265N^o 269N^o 35N^o 42N^o 357N^o 48

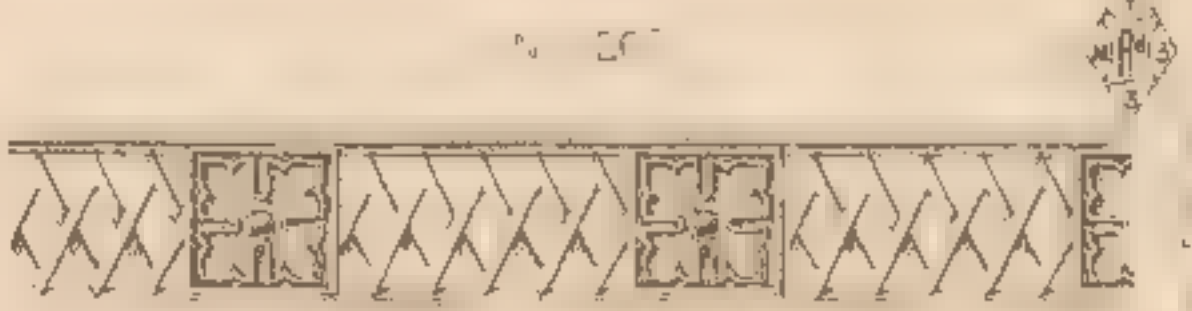
One face

N^o 229

One face

N^o 54N^o 13N^o 90N^o 428

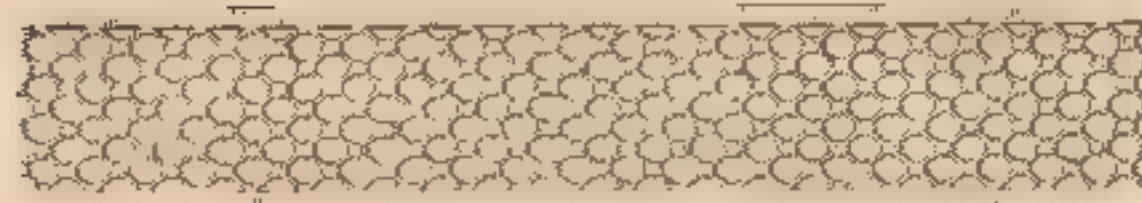
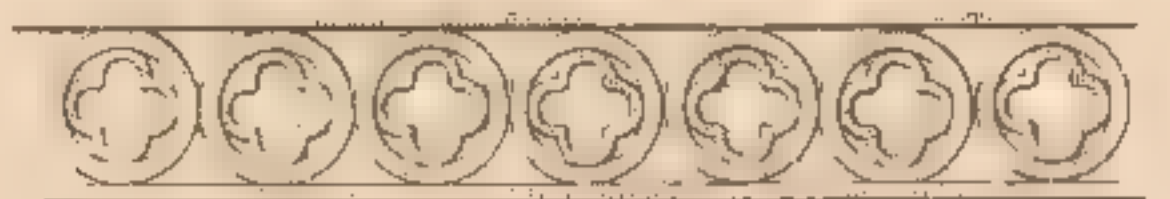
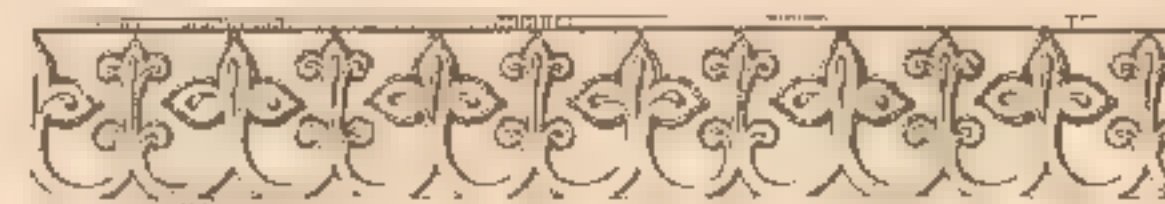
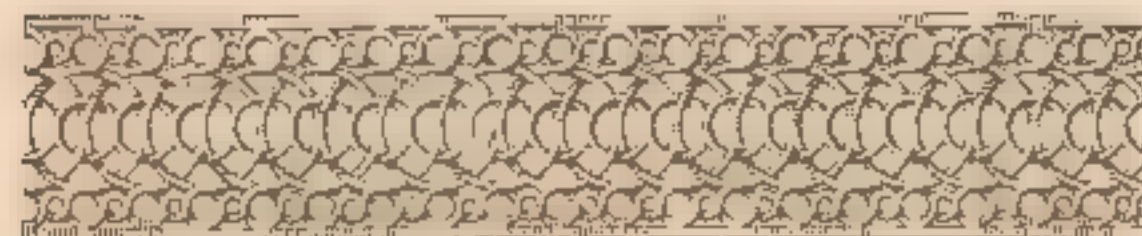
One face

N^o 56N^o 324N^o 57

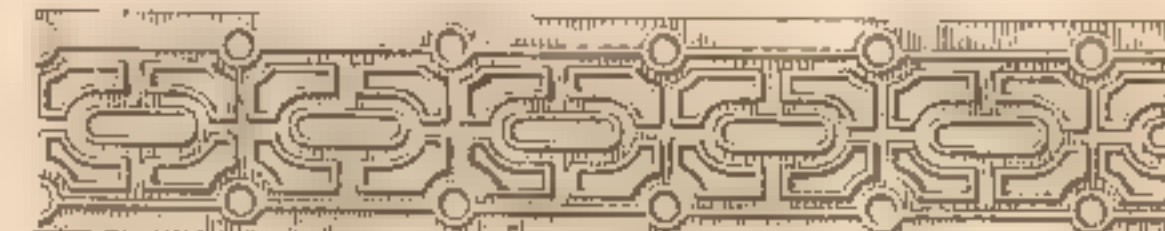
One face

SCALE 1 INCH = FOOT

MACFARLANE'S RAILING & CO

N^o 4N^o 69N^o 92N^o 54N^o 356N^o 91N^o 255N^o 253N^o 53N^o 90N^o 333N^o 257N^o 53N^o 36

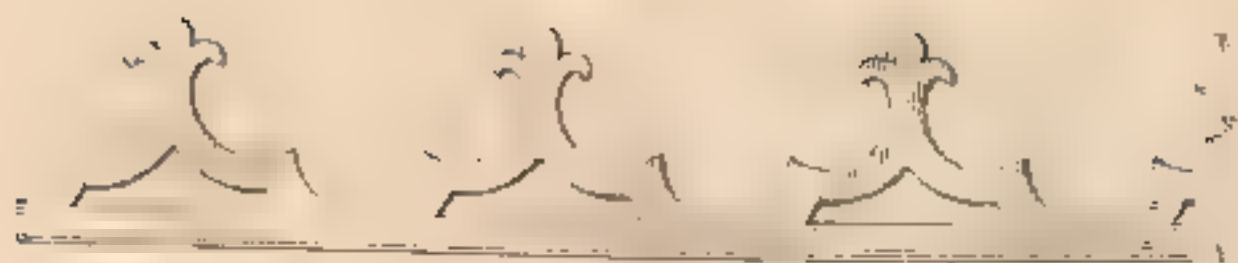
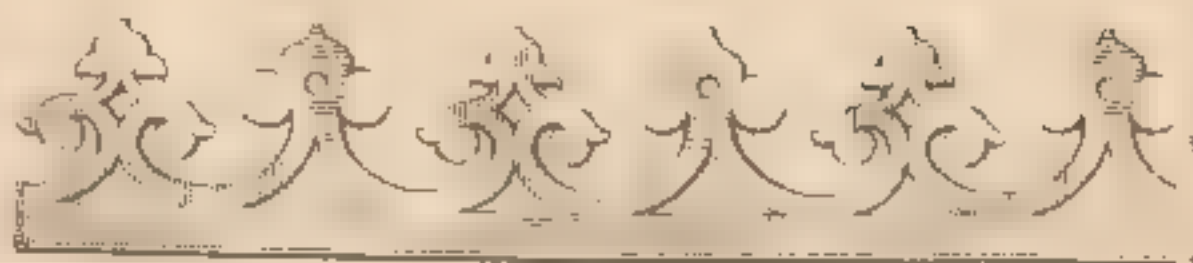
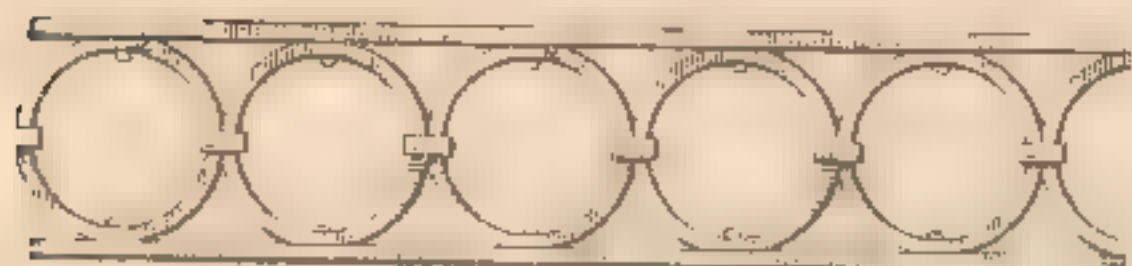
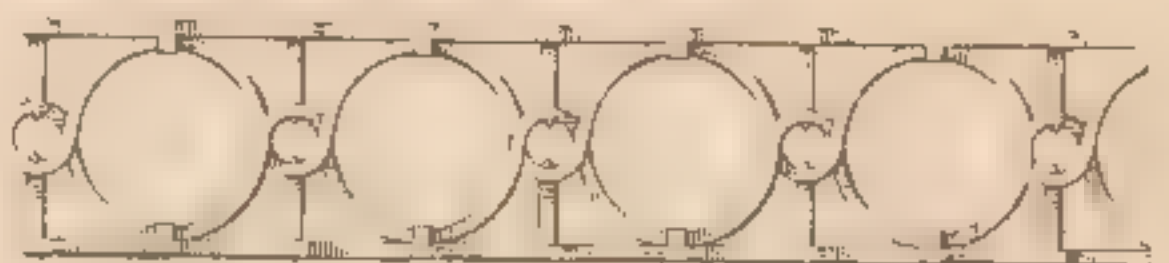
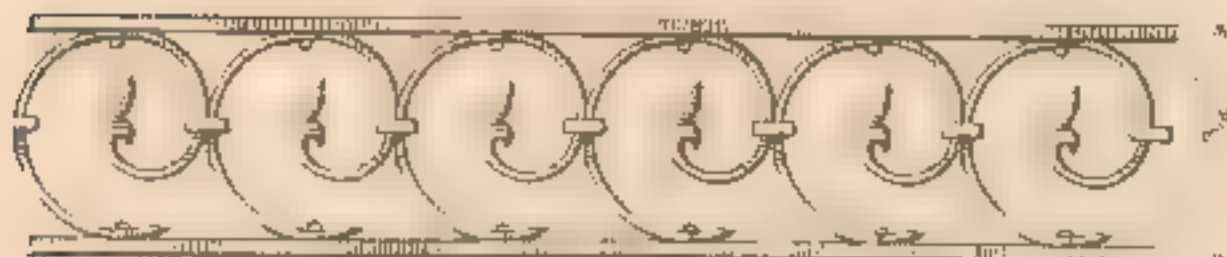
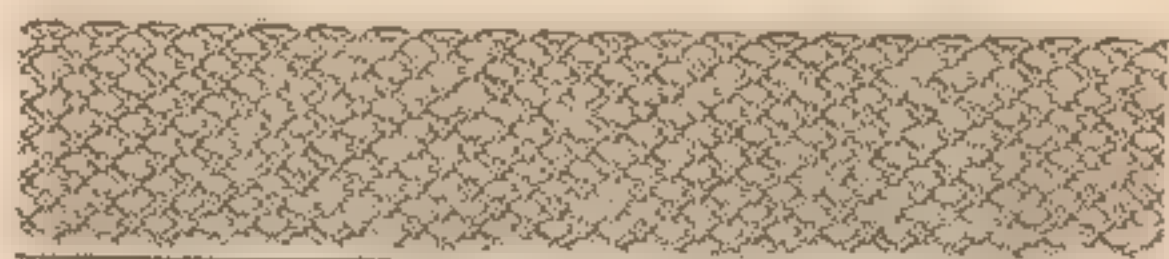
One face

N^o 258N^o 343

One face

ALL SIZES — 1 FOOT

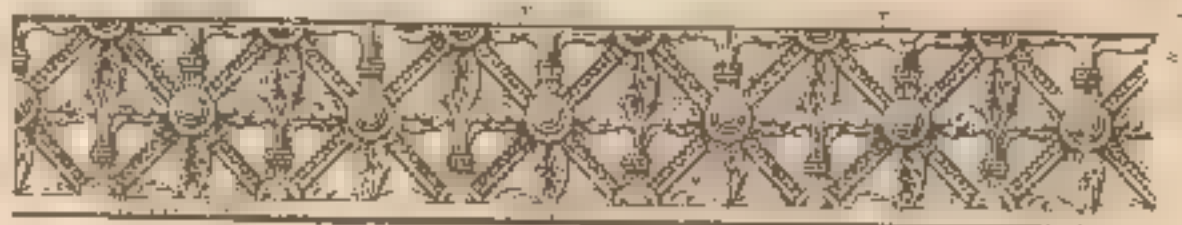
MACFARLANE'S RAILING & CO

N^o 225N^o 78N^o 2N^o 323N^o 270N^o 47N^o 2N^o 361

One face

N^o 40N^o 09

One face

N^o 33N^o 133N^o 267N^o 146

One face

One face

N^o 129

SCALE INCH

MACFARLANE'S RAILING & C

No 81



No 82



No 83



No 84



No 85

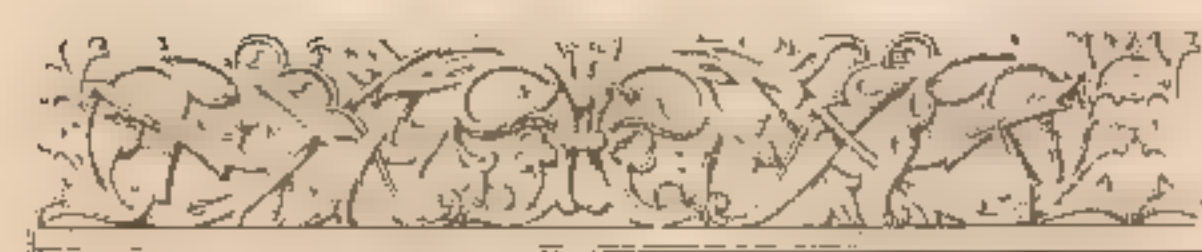


No 86

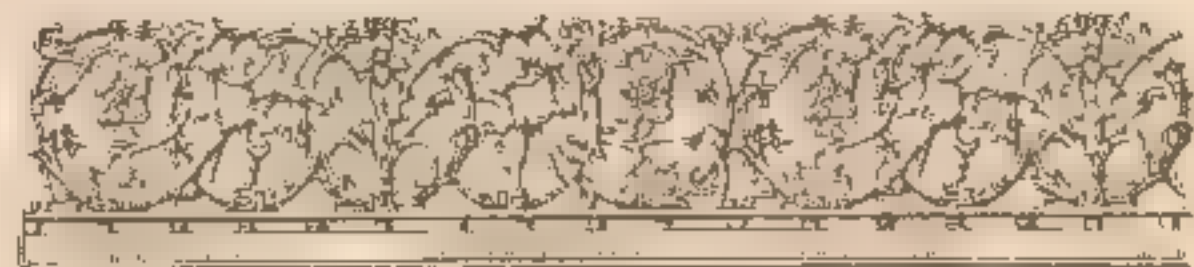


One face

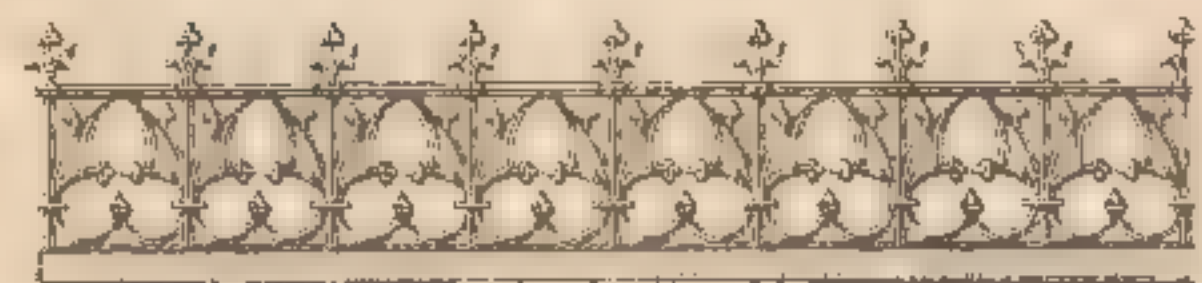
No 87



No 88



No 89



No 90



No 91

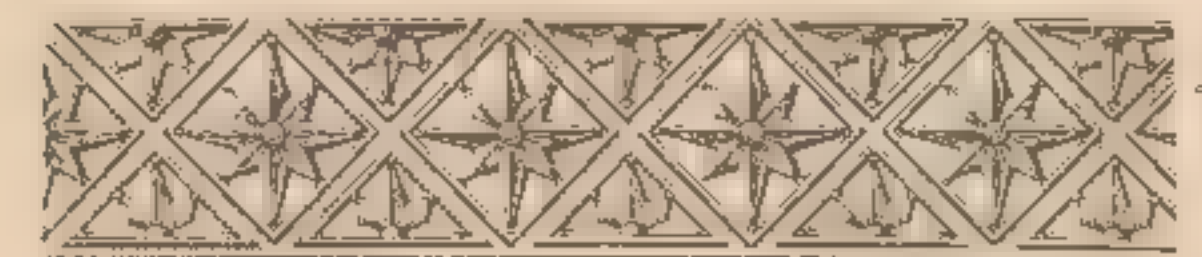


No 92



One face

No 93

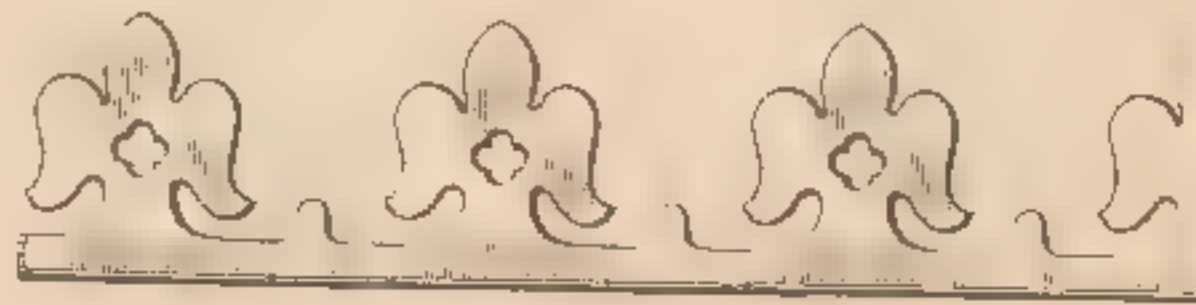
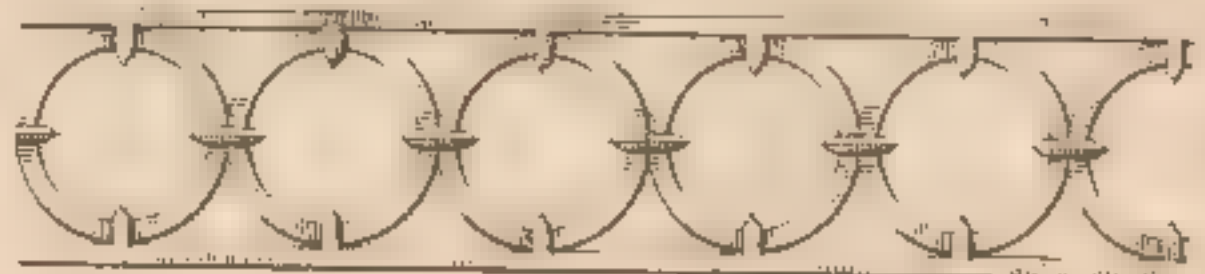
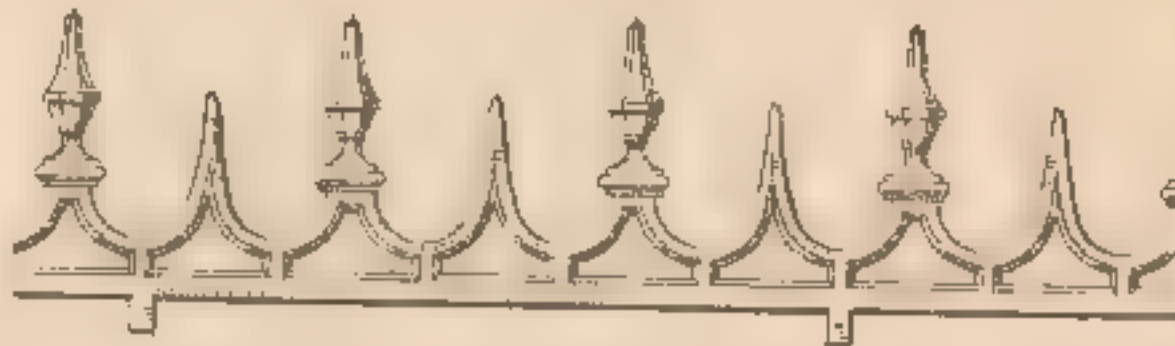
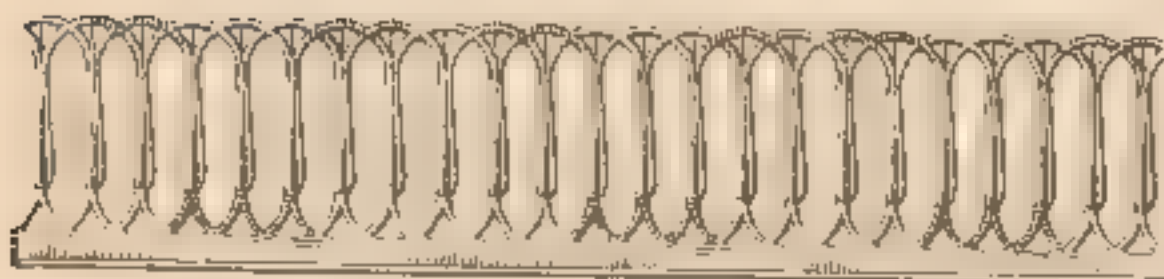
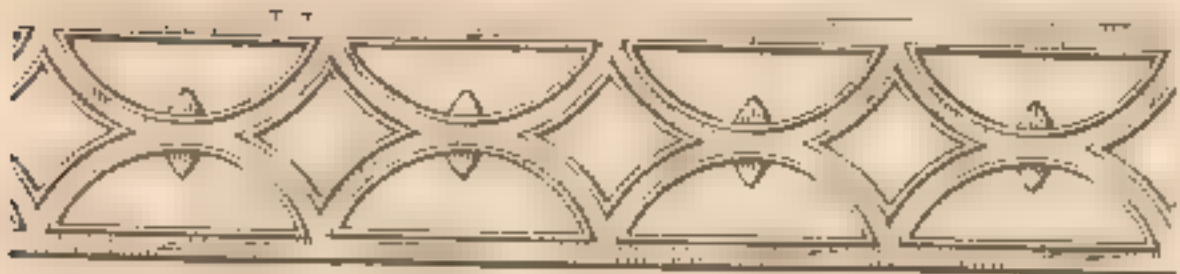
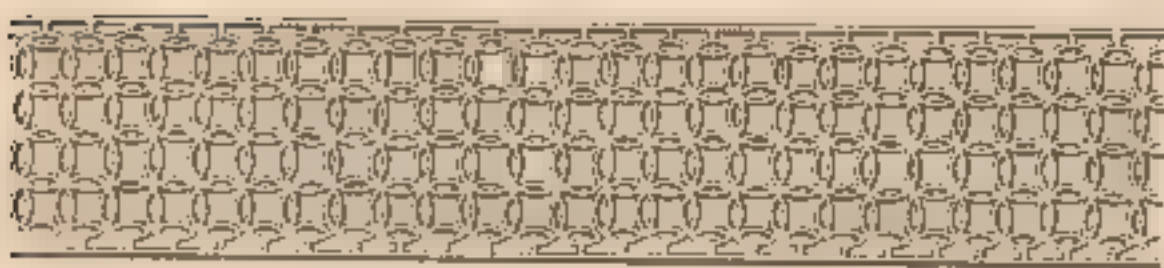


No 94



SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING &C

N^o 13N^o 2N^o 43N^o 30N^o 264N^o 256N^o 288N^o 296N^o 393N^o 333N^o 357N^o 403

One face

N^o 259

One face

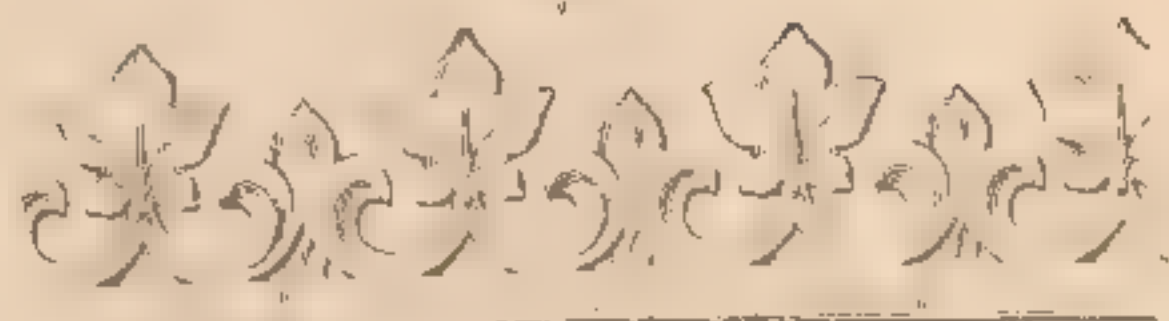
N^o 438

One face

SCALE 1 INCH = 1 FOOT

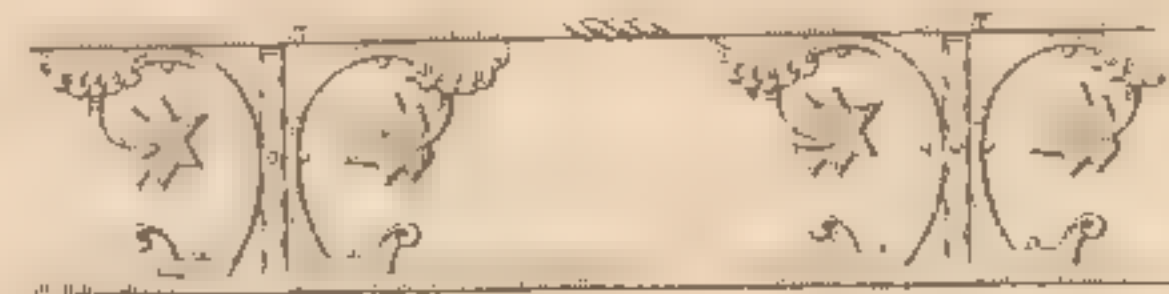
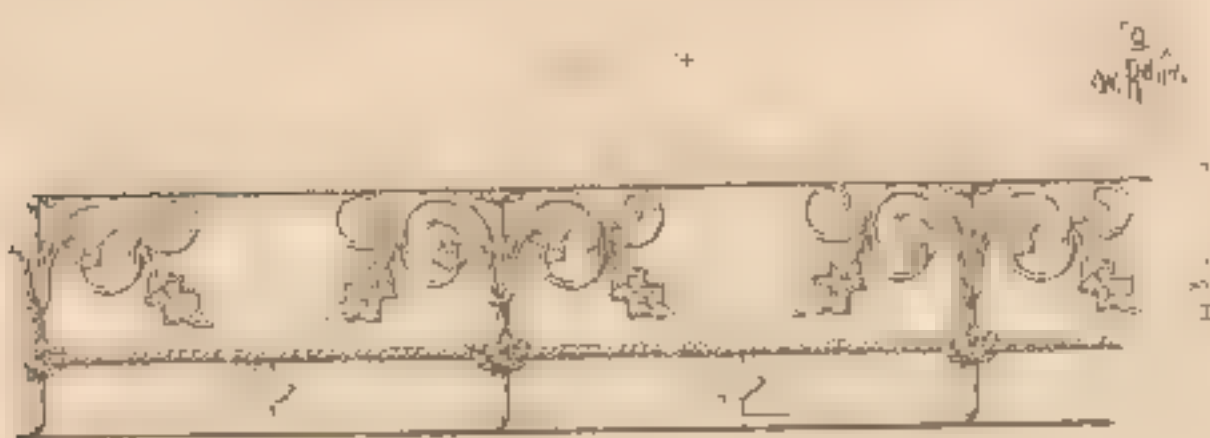
MA FAF ALF RAILING &C

Nº 83



44

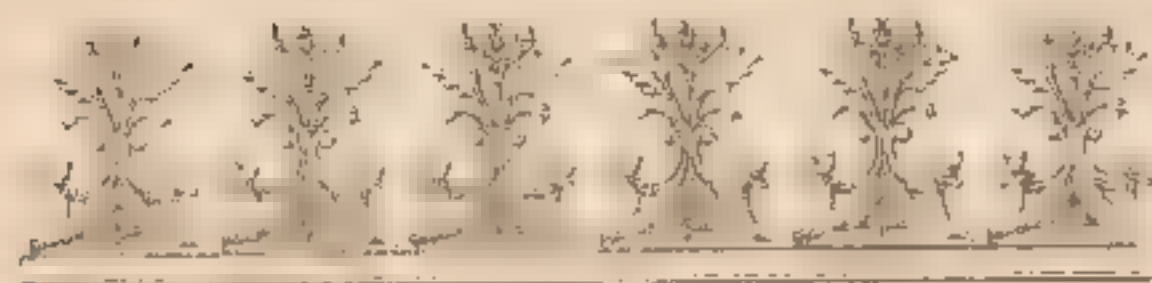
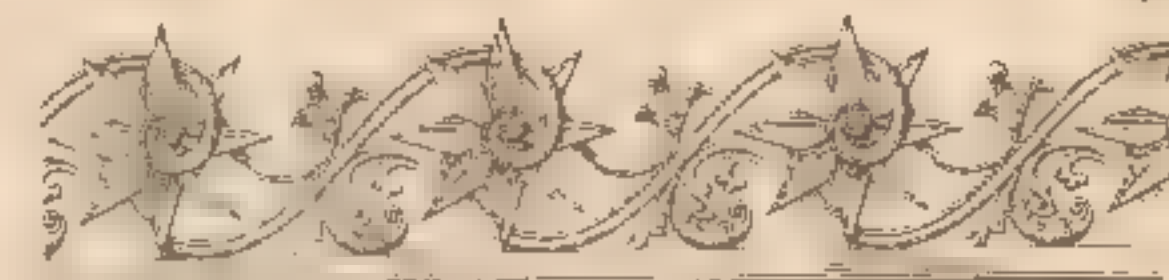
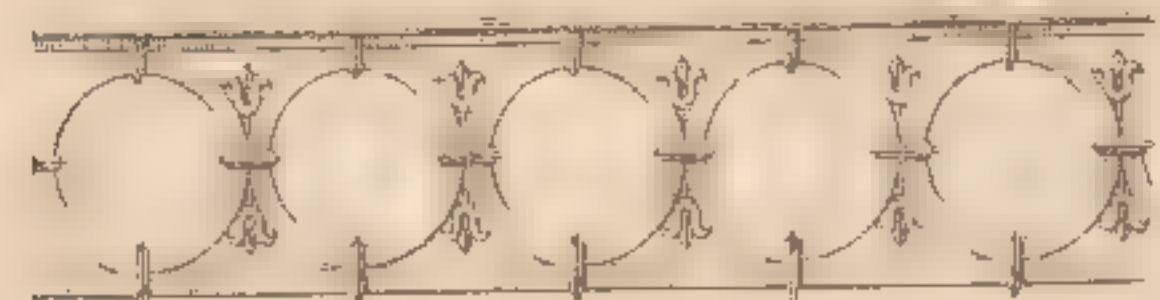
5 1/2 x 1 1/2



Nº 43

Nº 43

5 1/2 x 1 1/2



One face

Nº 286

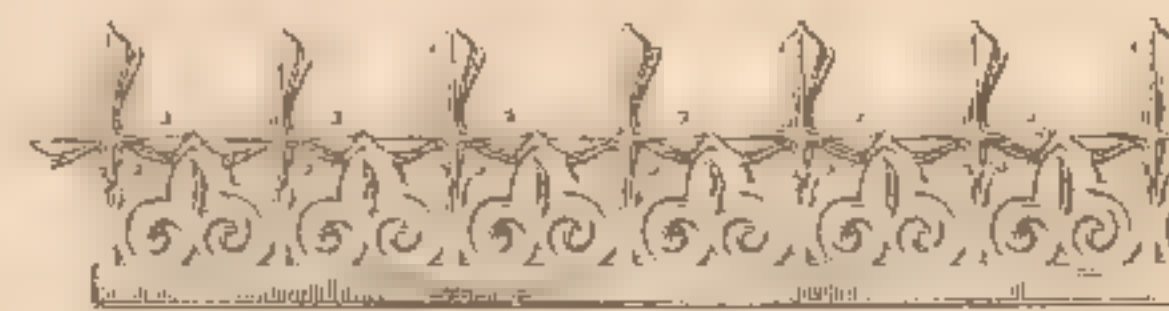


One face

Nº 43

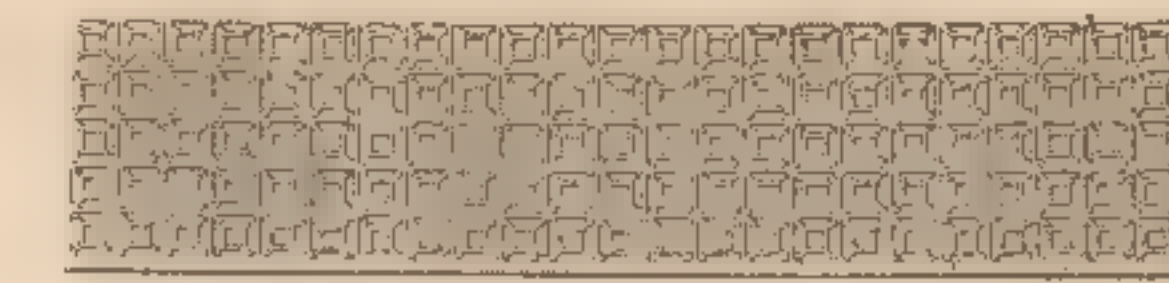


8'



Nº 344

Nº 344

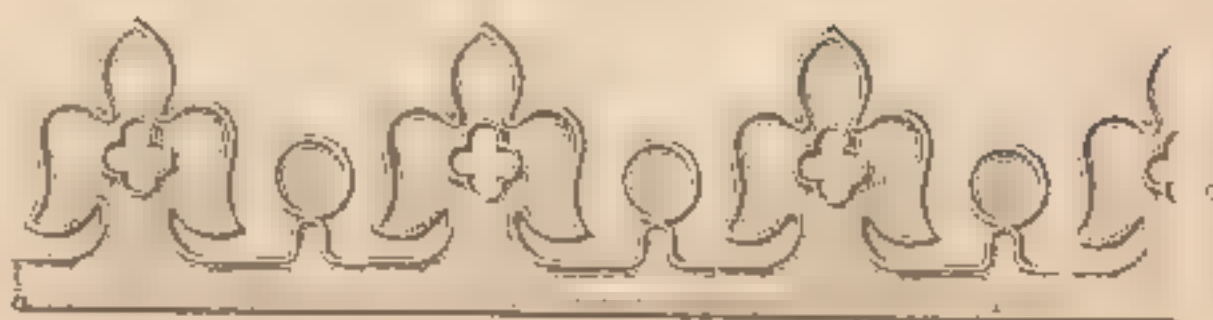


MACFARLANES RAILING & CO

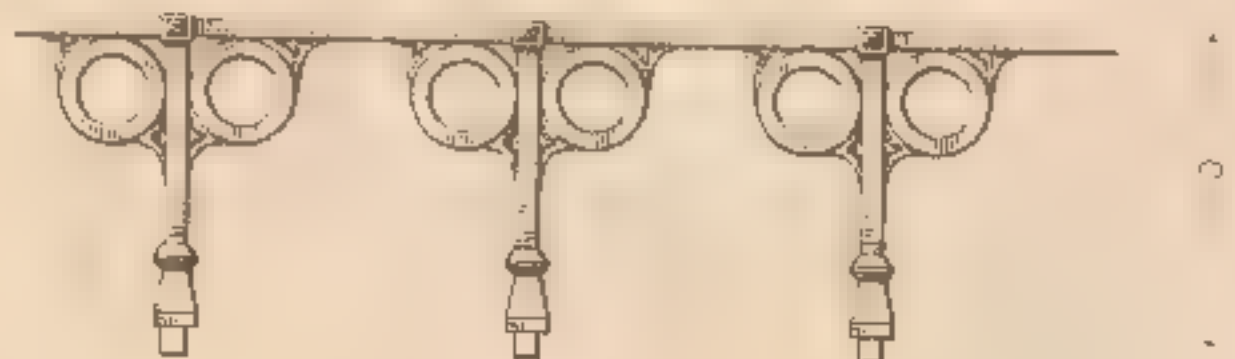
N^o 7



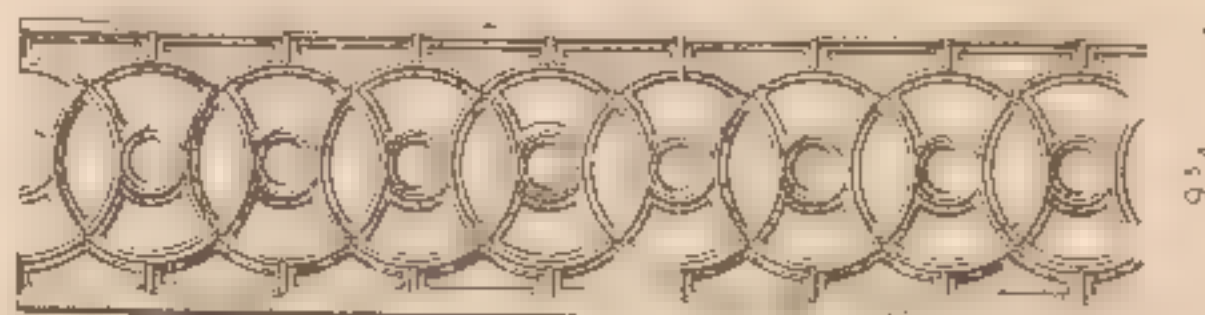
N^o 5



N^o 74



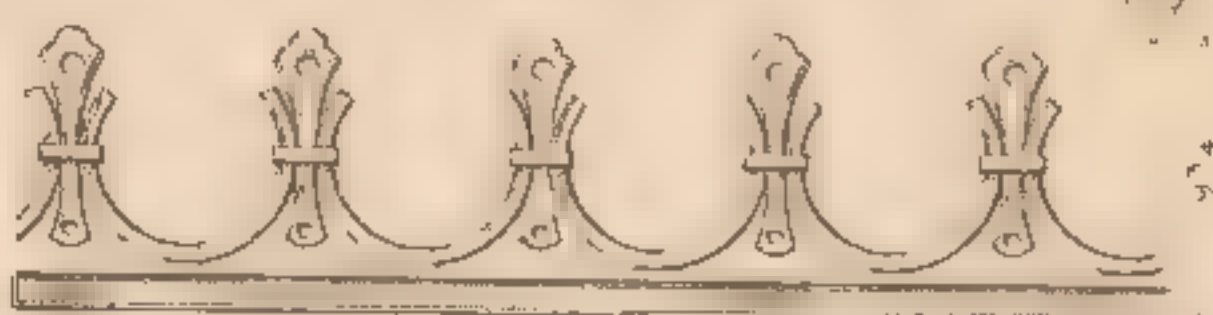
N^o 320



N^o 7



N^o 43



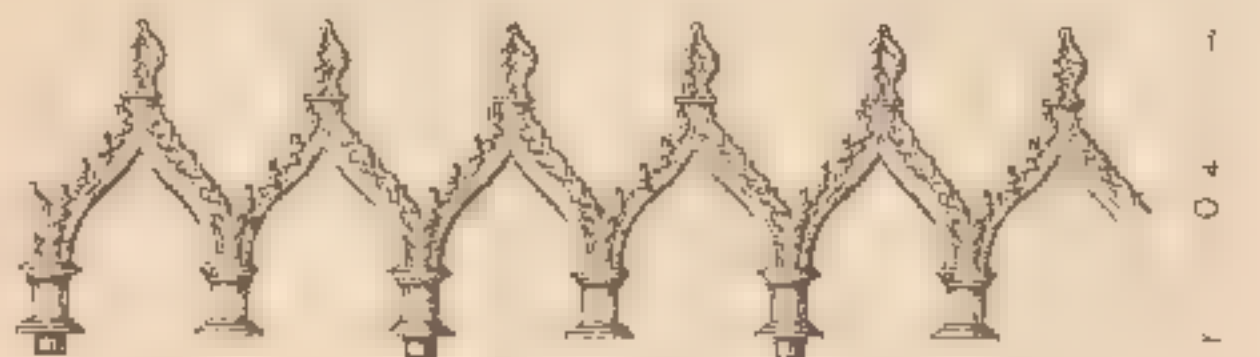
N^o 21



N^o 4



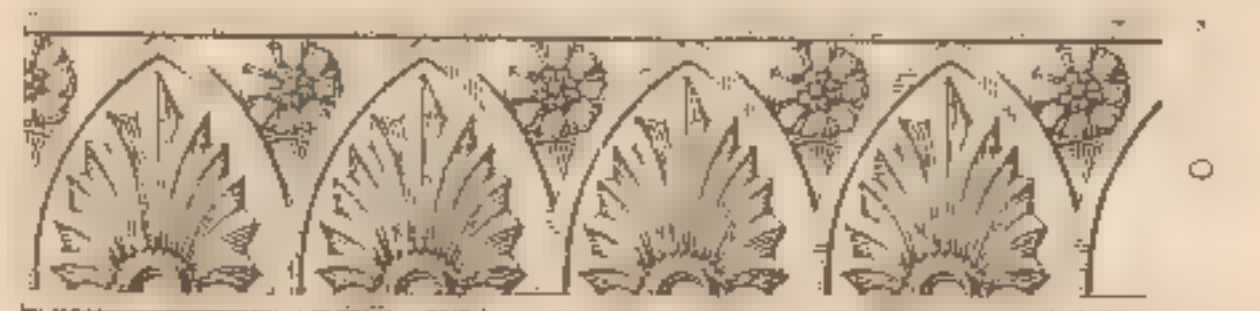
N^o 243



N^o 27



N^o 268

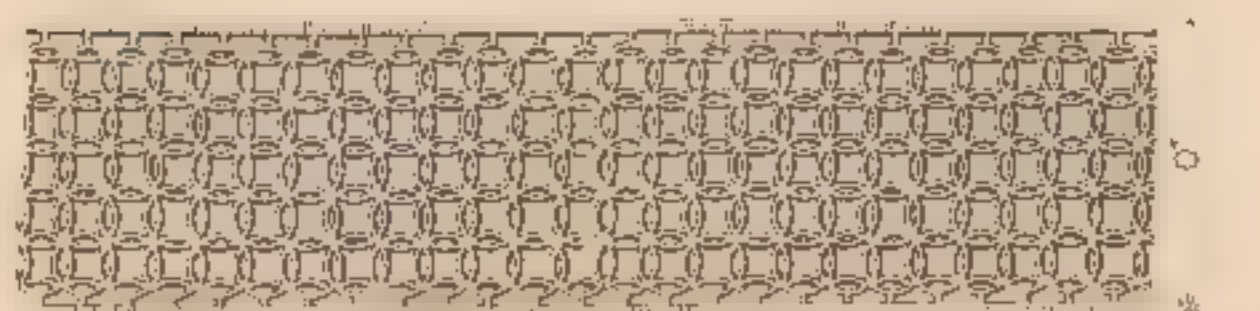


N^o 88



One face

N^o 357

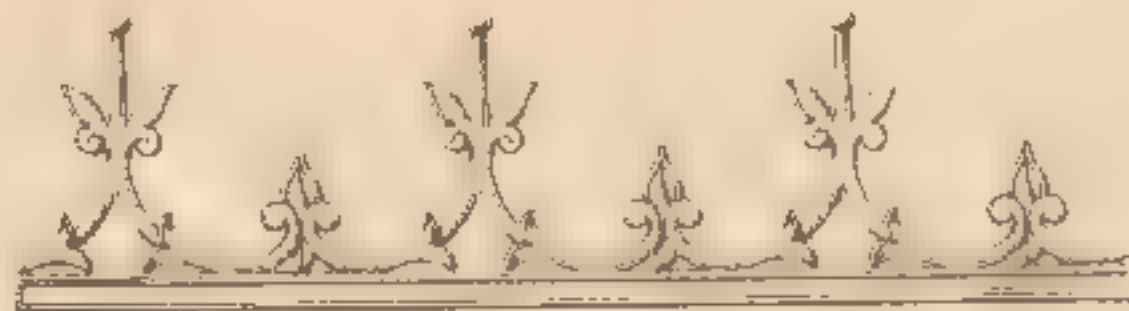
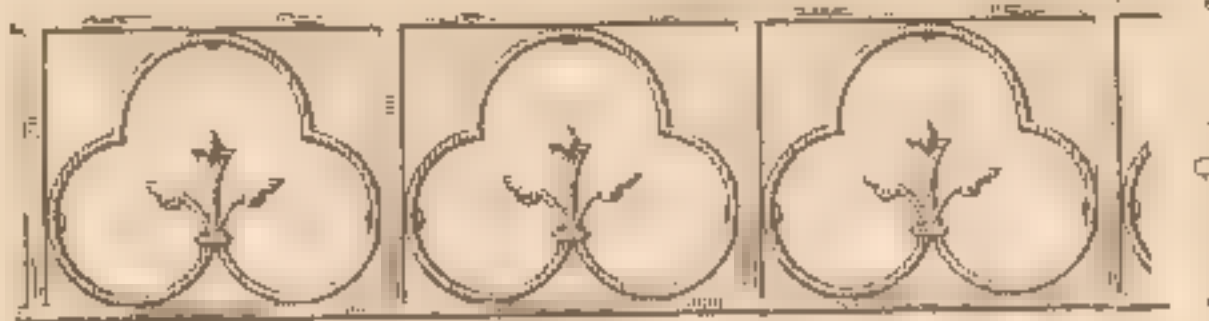
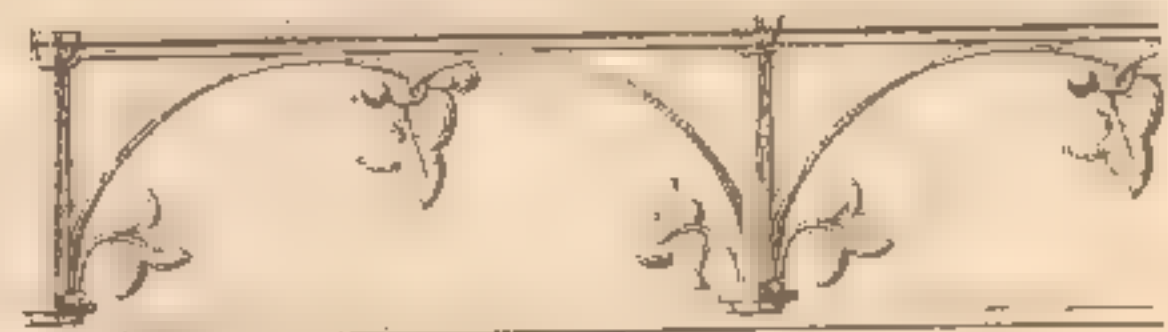
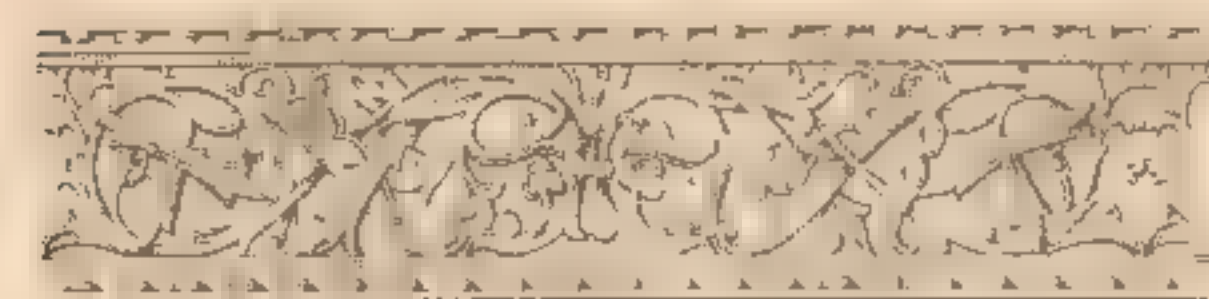
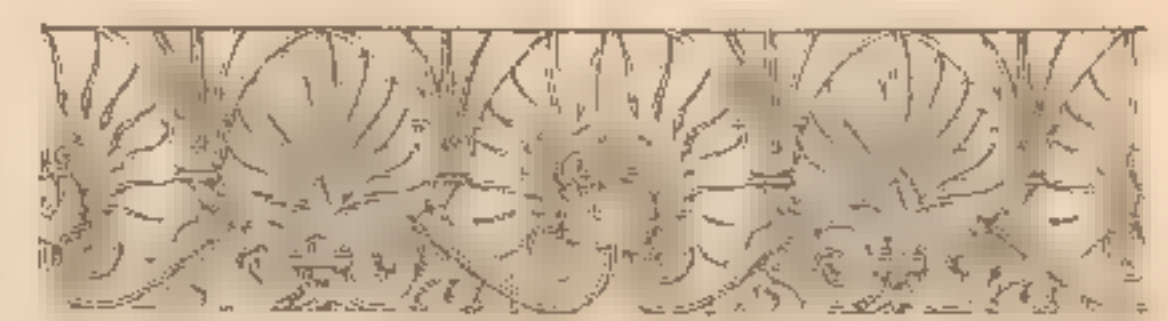


N^o 333



SCALE 1 INCH = 1 FOOT

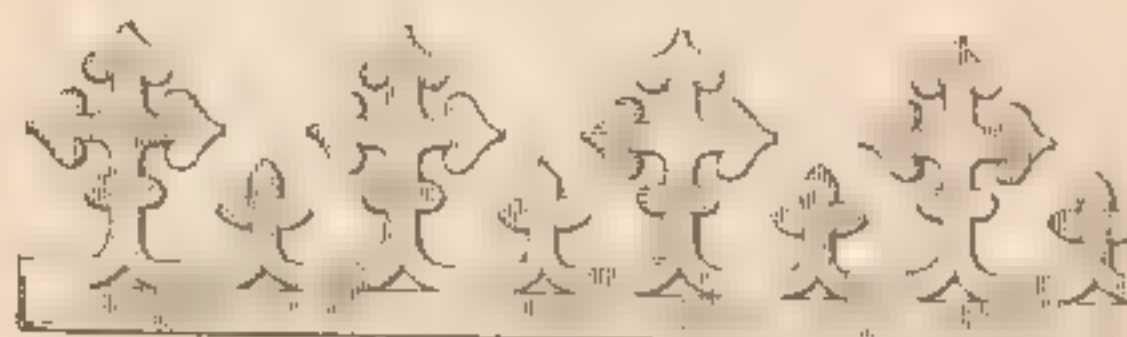
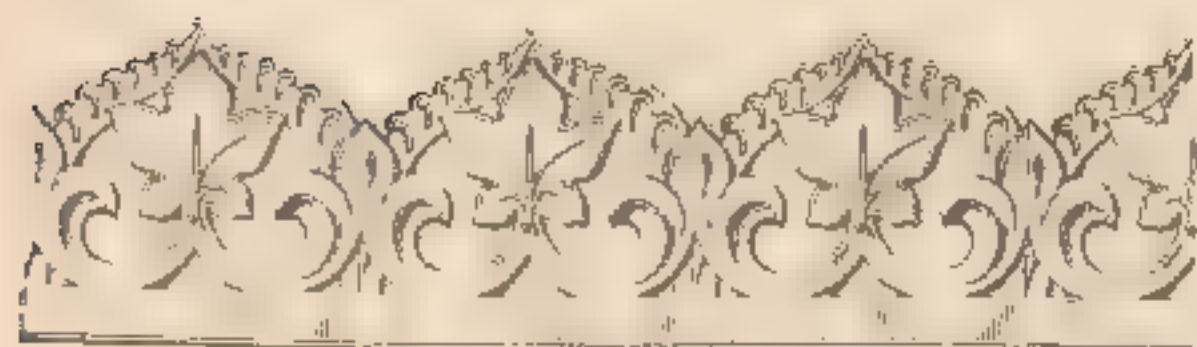
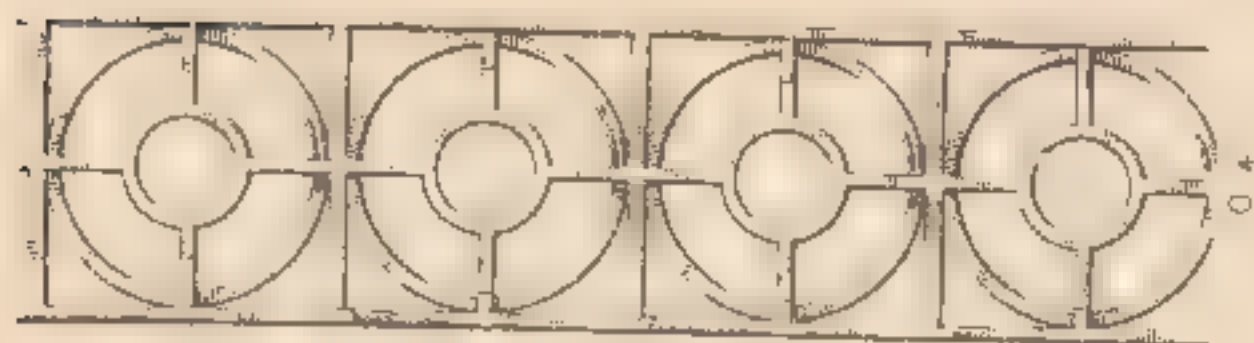
MACFARLANE'S RAILING & C

N^o 52N^o 3N^o 12N^o 49N^o 6N^o 4N^o 7N^o 76N^o 9N^o 428N^o 55N^o 230

Border One face

SCALE 1 INCH = FOOT

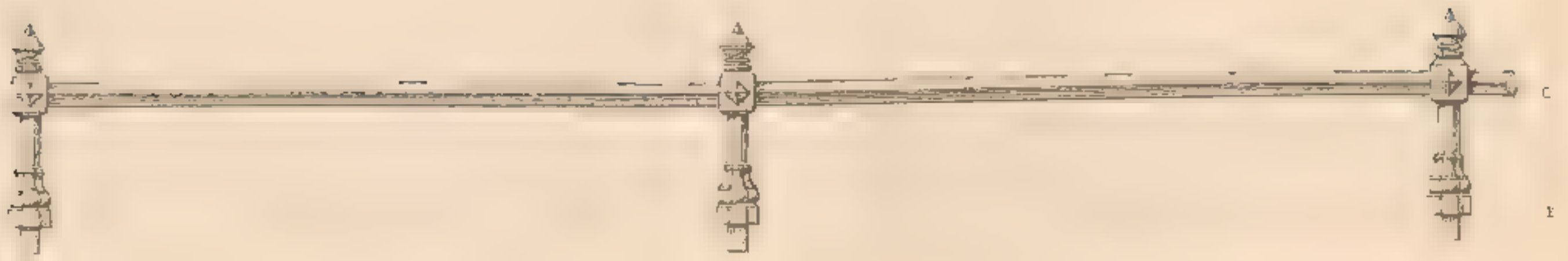
MACFARLANE'S RAILING & CO



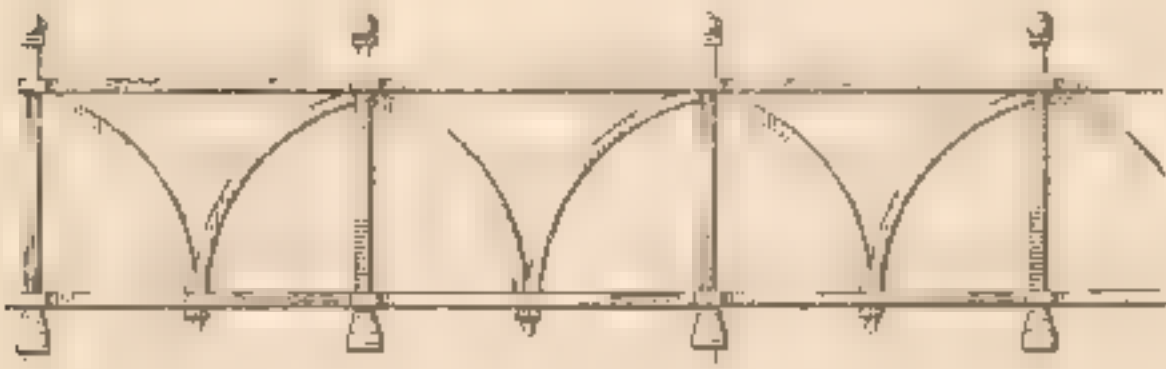
SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING & CO

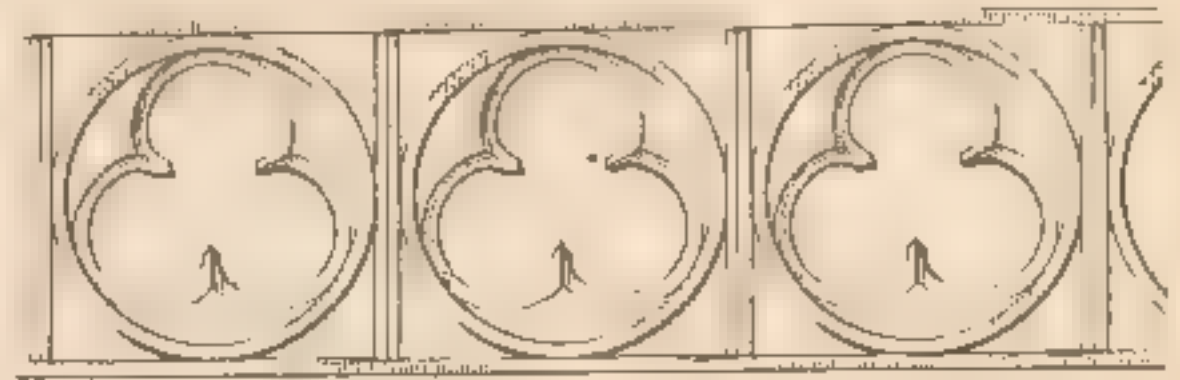
N^o 88



N^o 224



N^o .



N^o 35



N^o 165



N^o 79



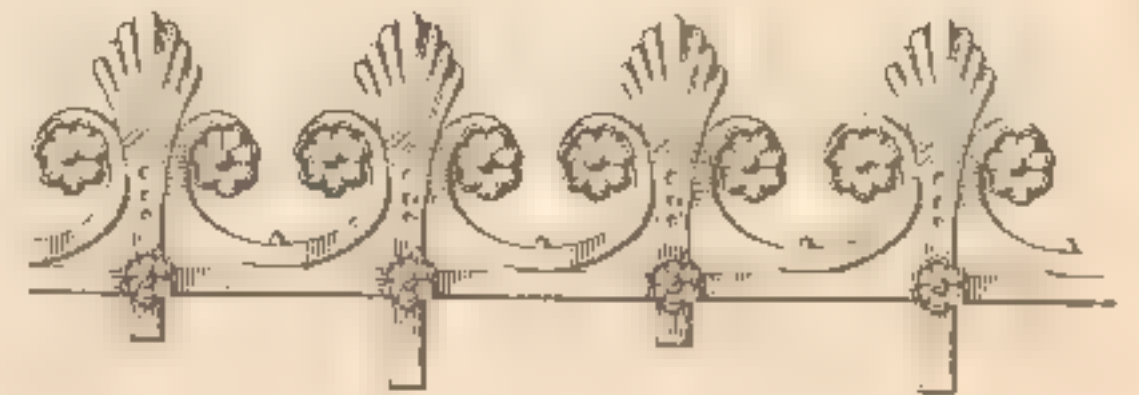
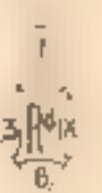
N^o 226



N^o 76



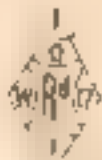
N^o 152



N^o 36



N^o 57

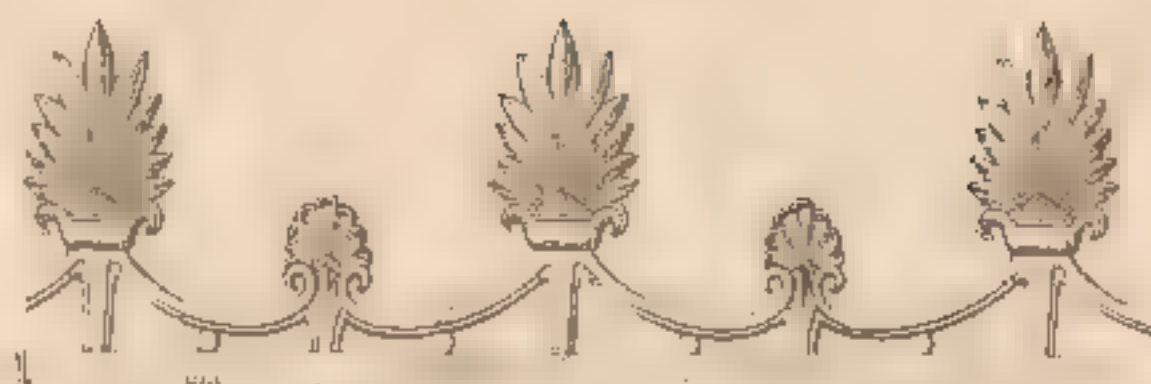


MACFARLANE'S RAILING

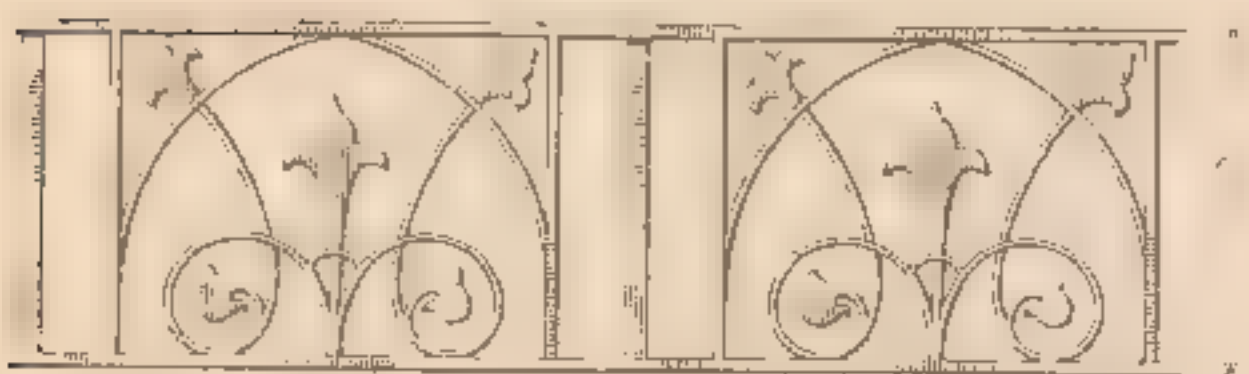
No 5



No 6



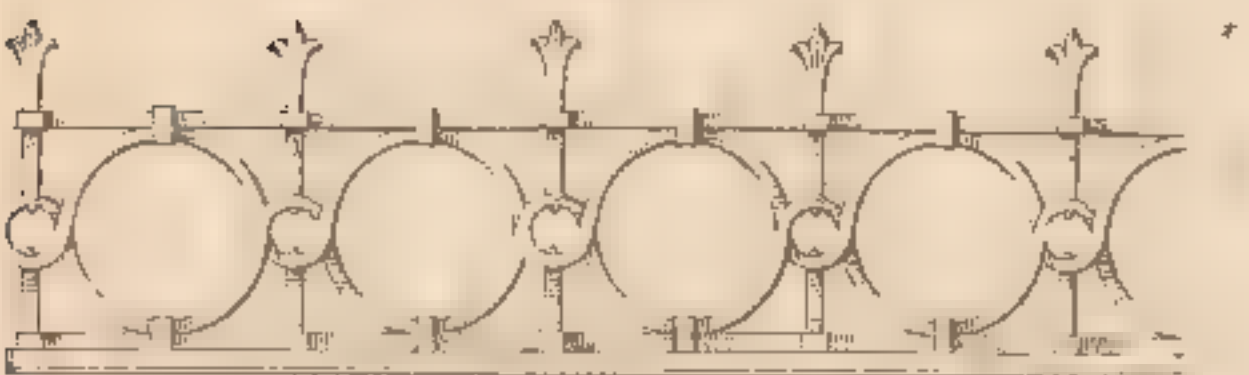
No 9



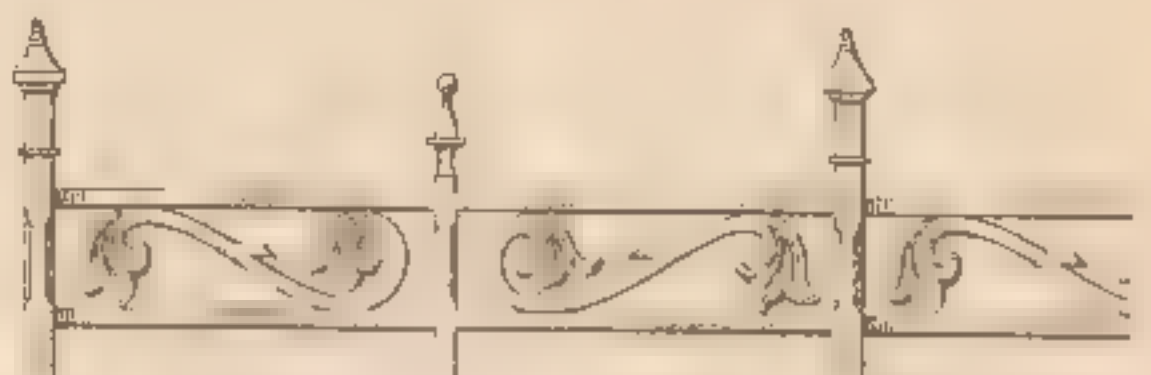
No 7



No 11



No 22



No 24



No 32



No 102

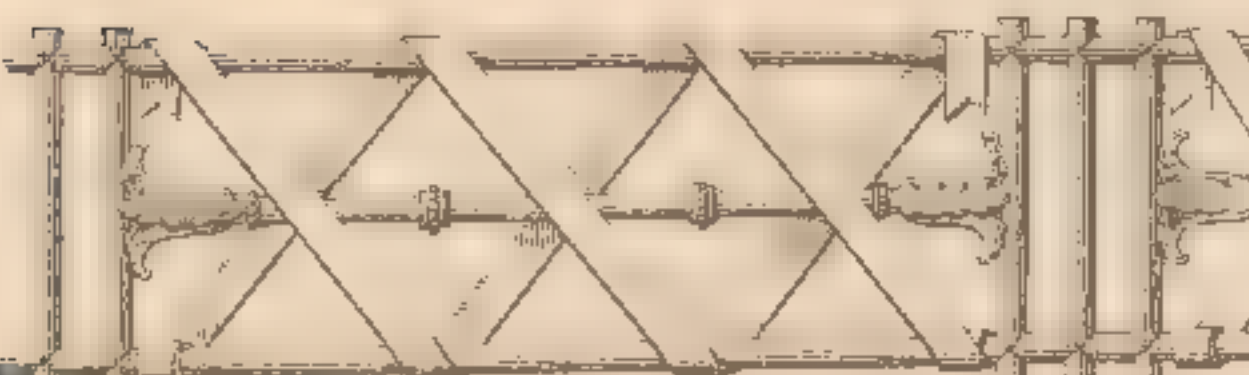


No 257

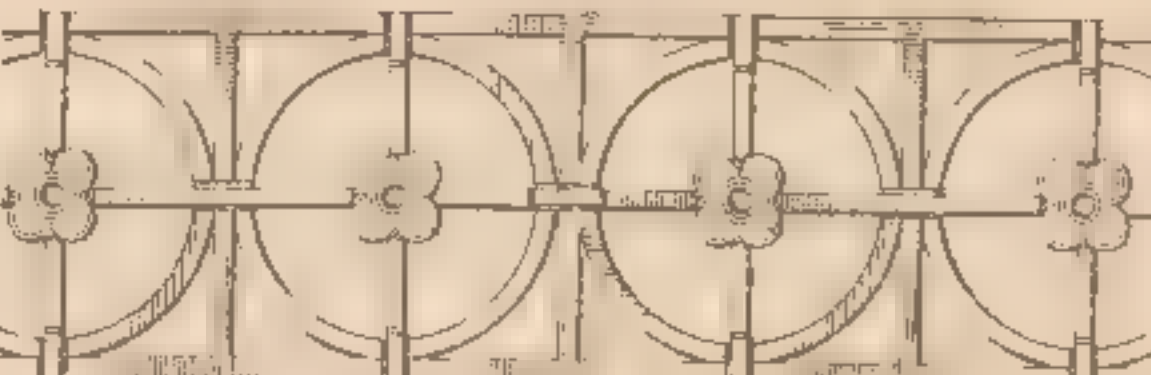


One face

5



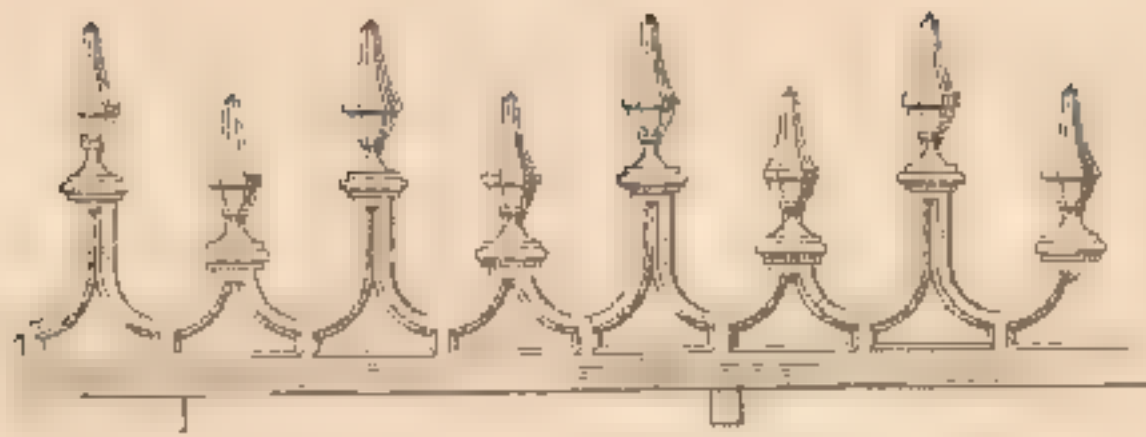
No 458



SCALE 1 INCH = 1 FOOT

MA FARLANE'S RAILING &c

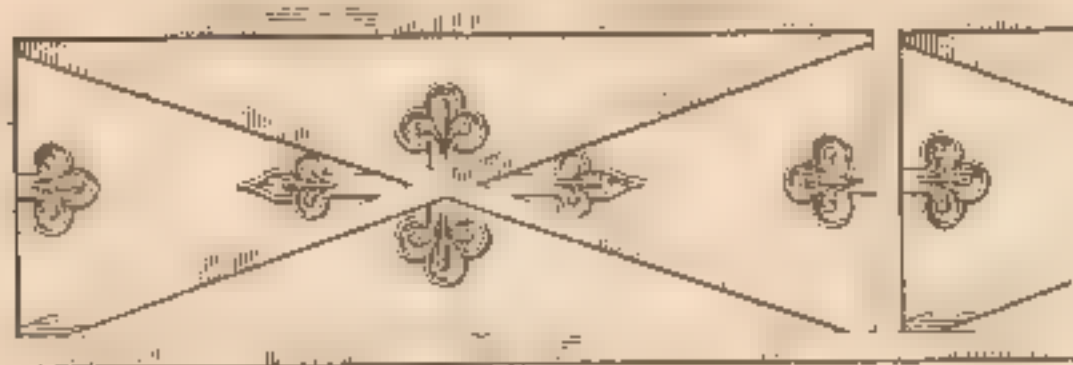
N^o 256



N^o 257



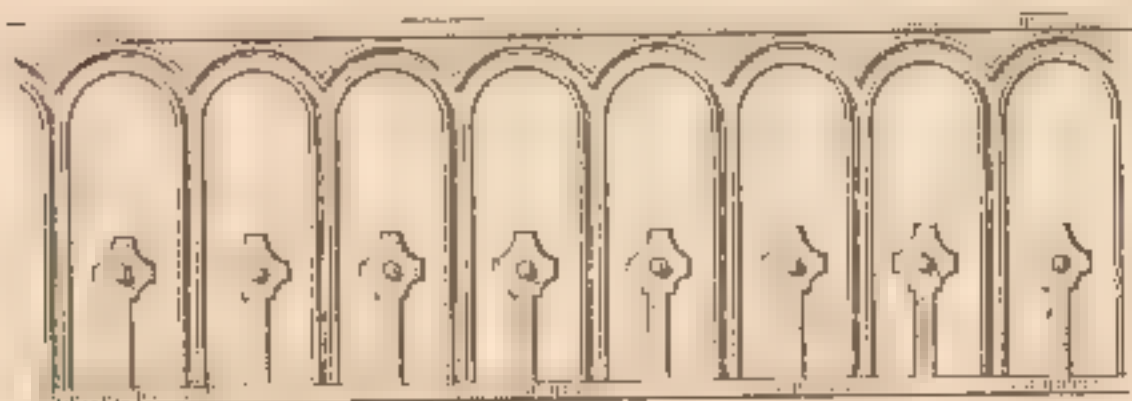
N^o 258



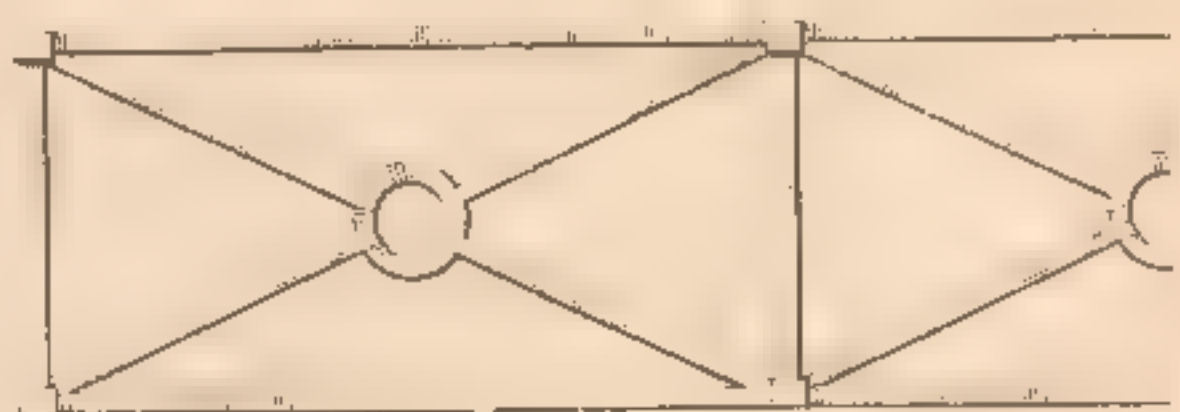
N^o 259



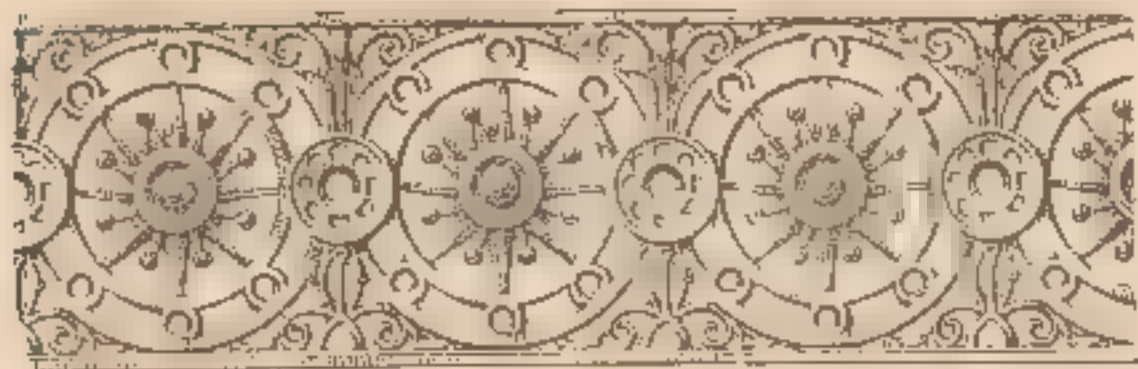
N^o 27



N^o 43^F



N^o 44



N^o 44



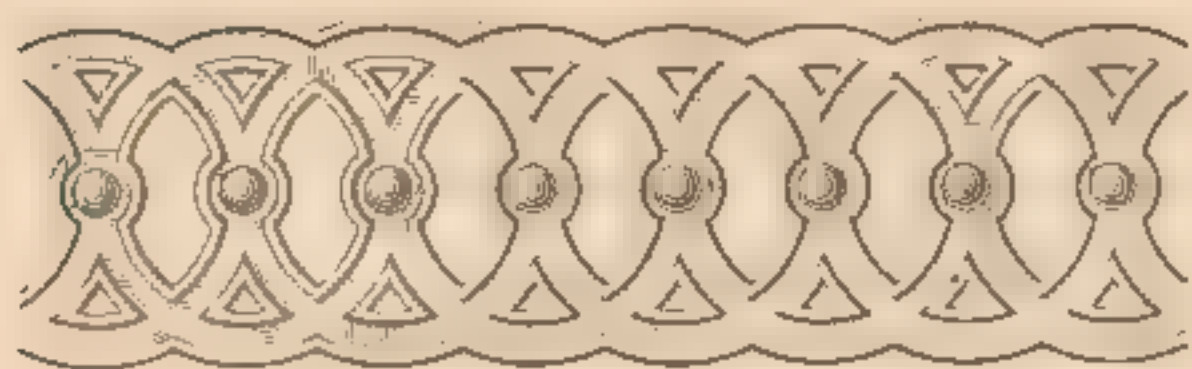
N^o 44



N^o 44

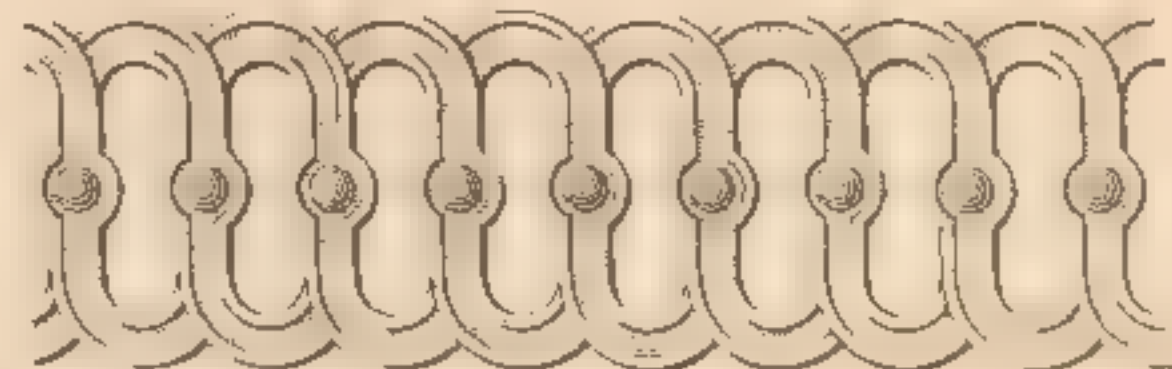


N^o 247



One face

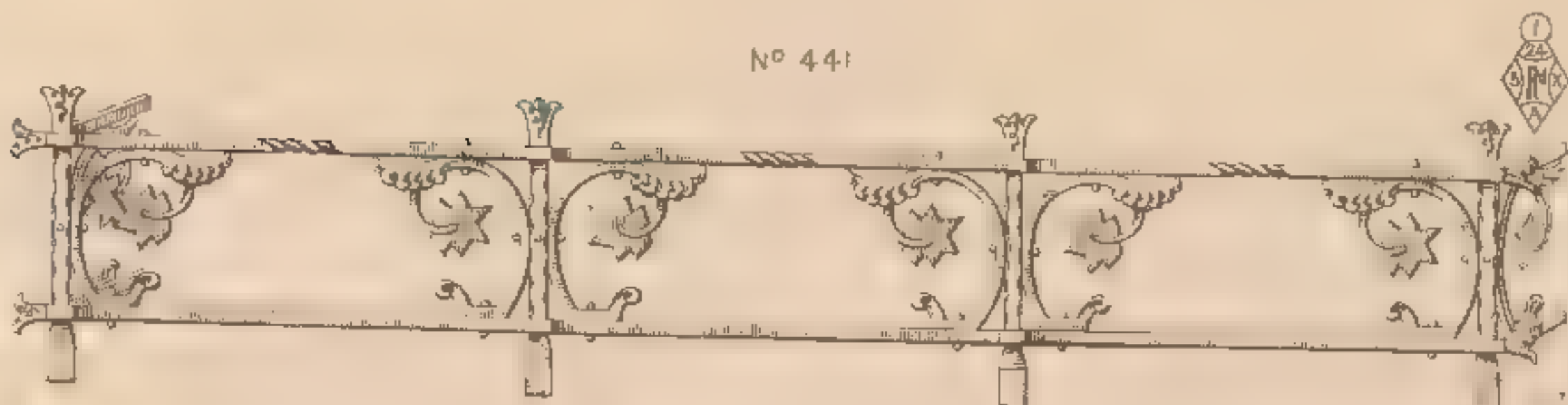
N^o 246



One face

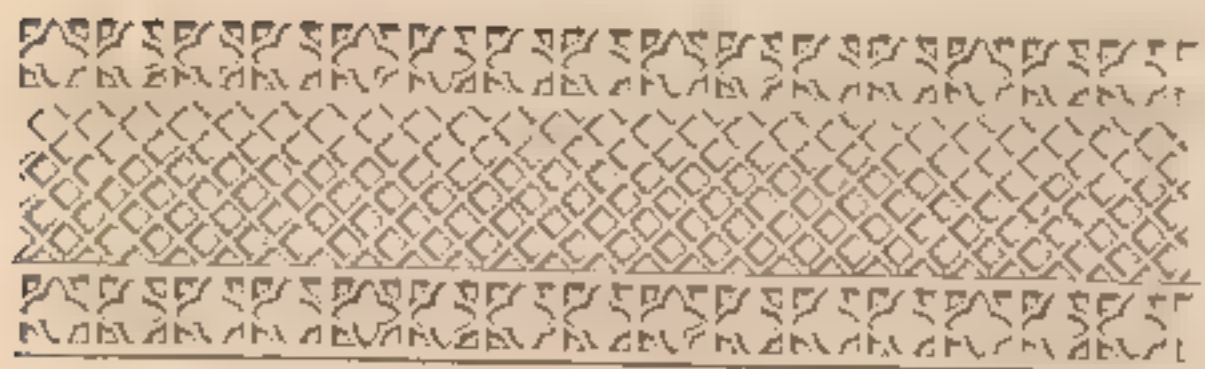
MACFARLANE'S RAILING & CO

No 441



- 6' 2 1/2" -
We make No 441 Balcony 4' 3" and 6' 2 1/2" long Other sizes to order

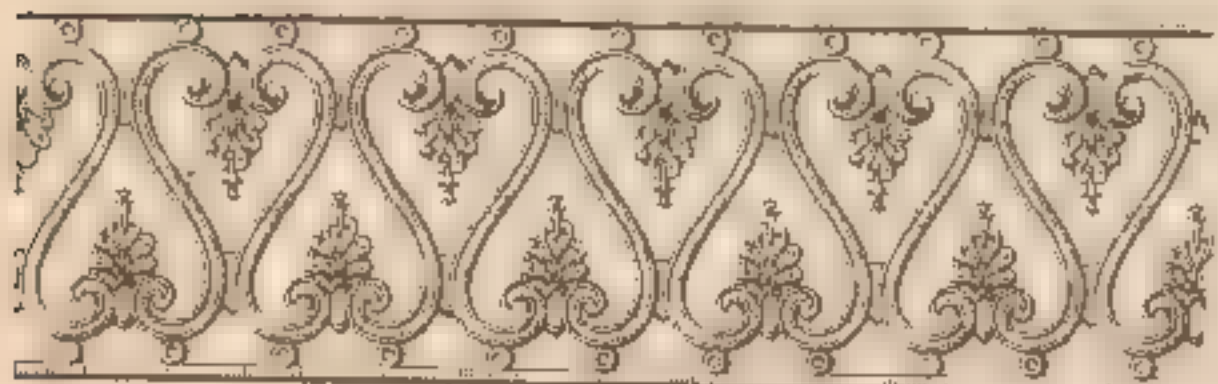
No 389



No 289



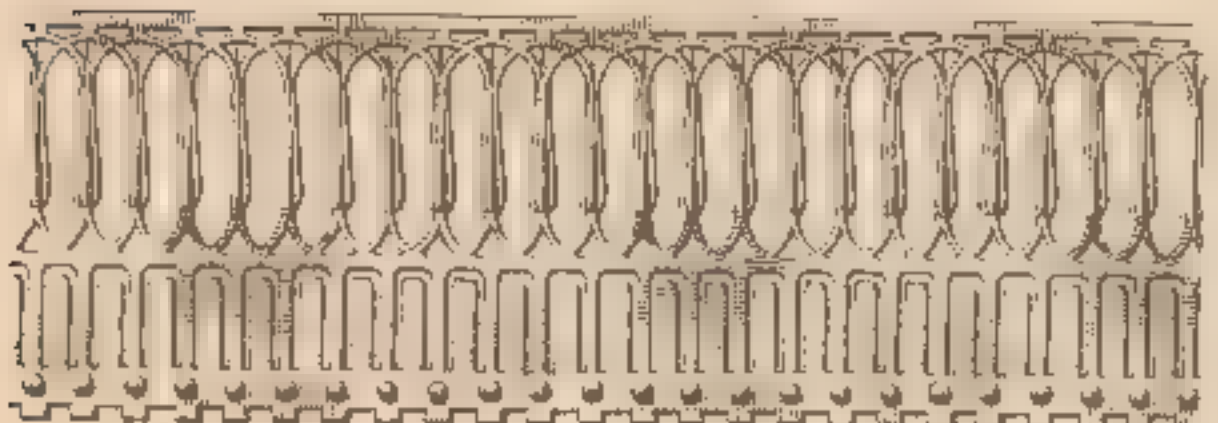
No 248



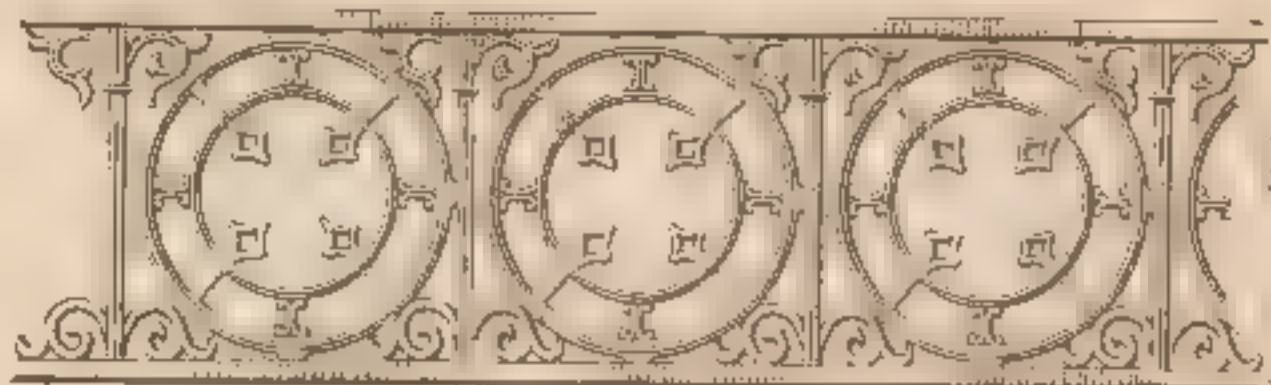
No 304



No 288



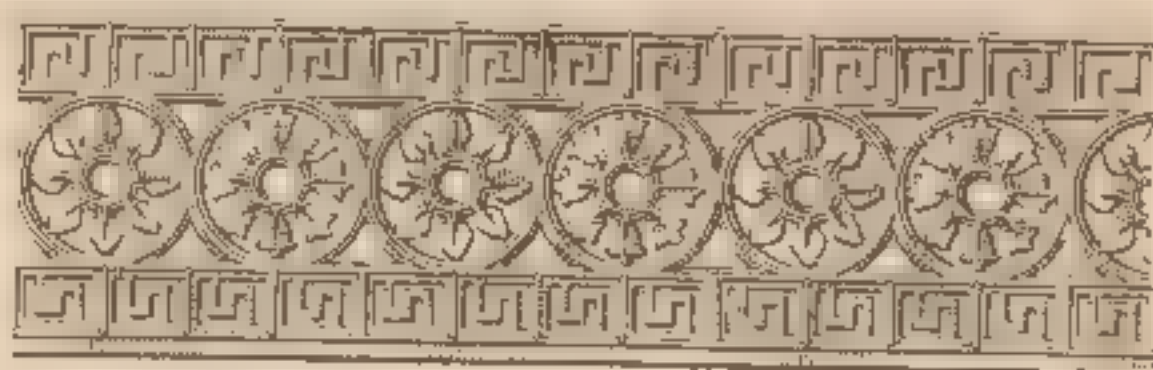
No 42



No 307



No 426

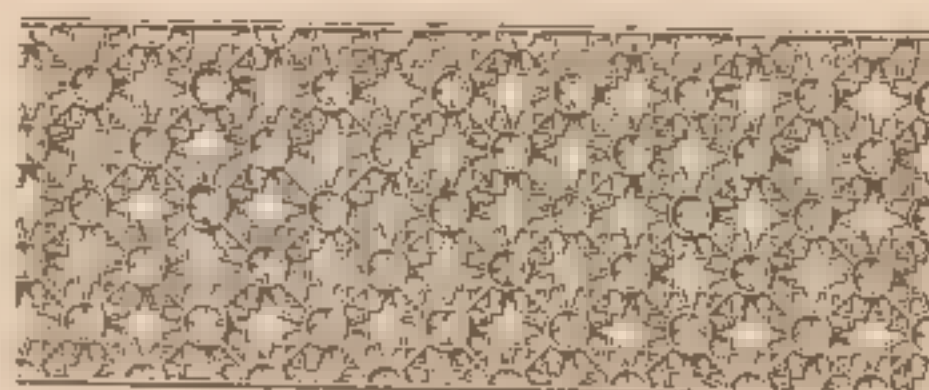


One face

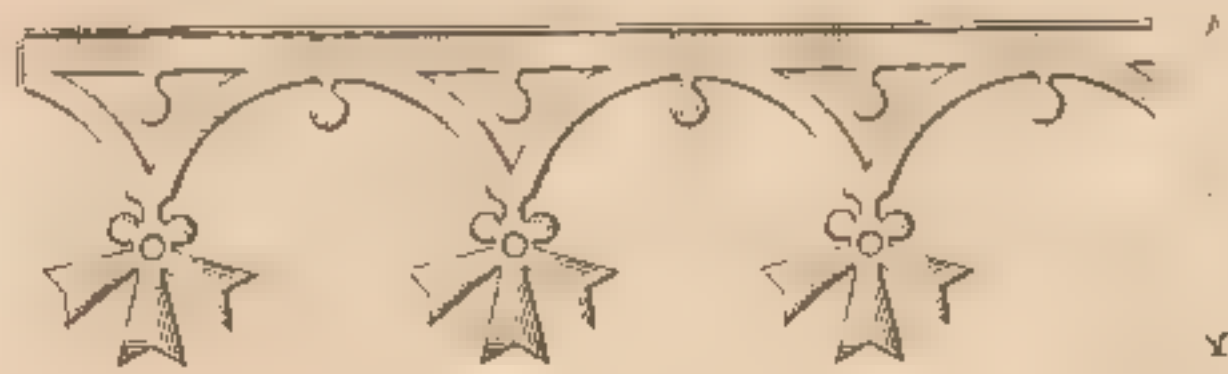
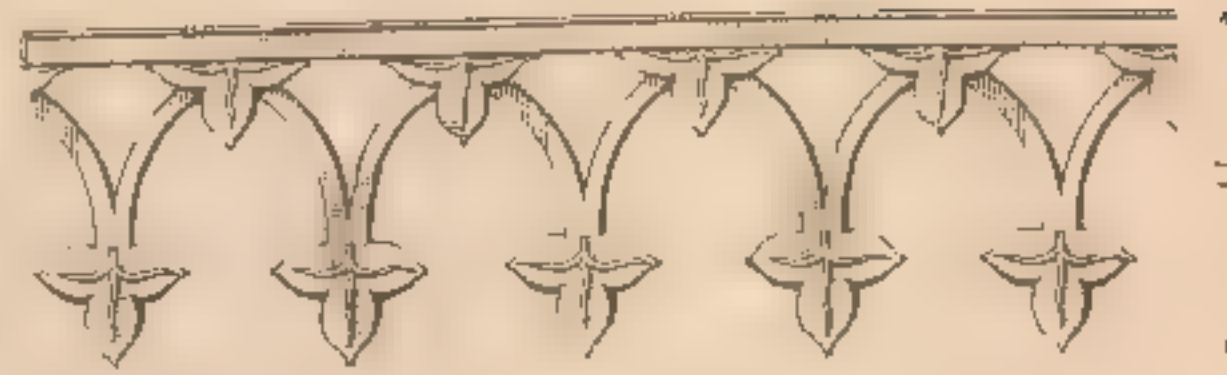
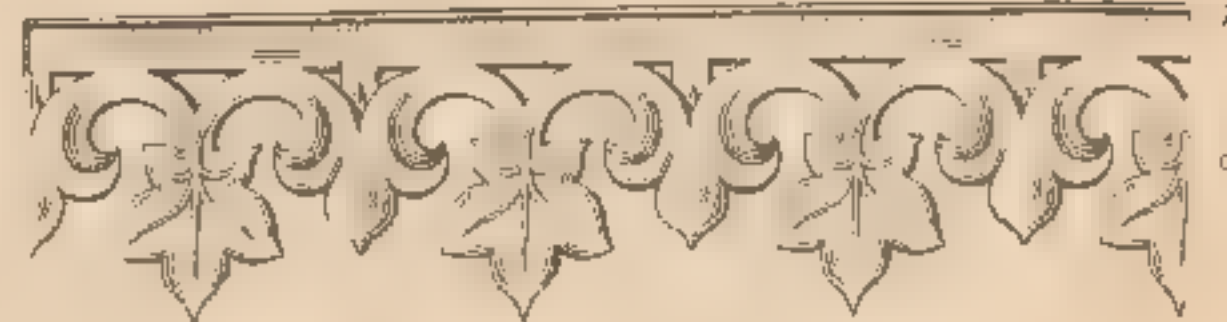
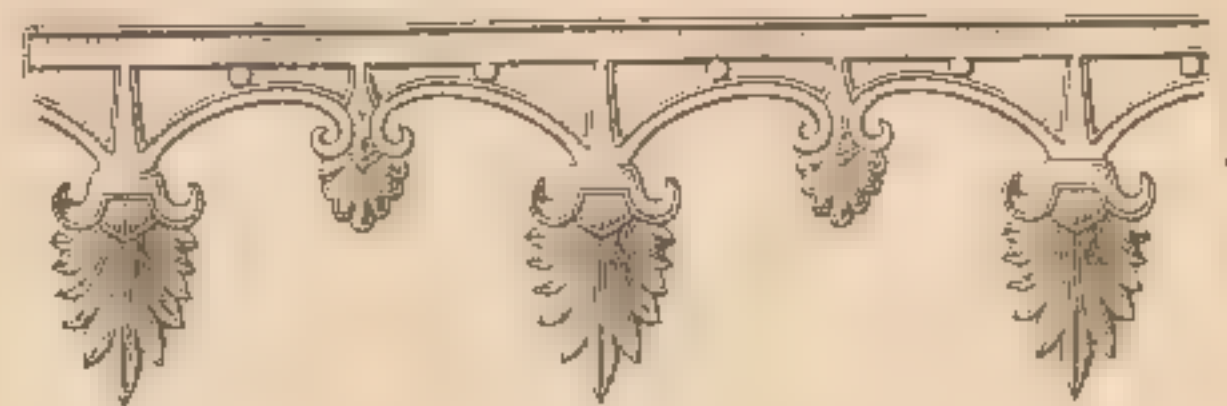
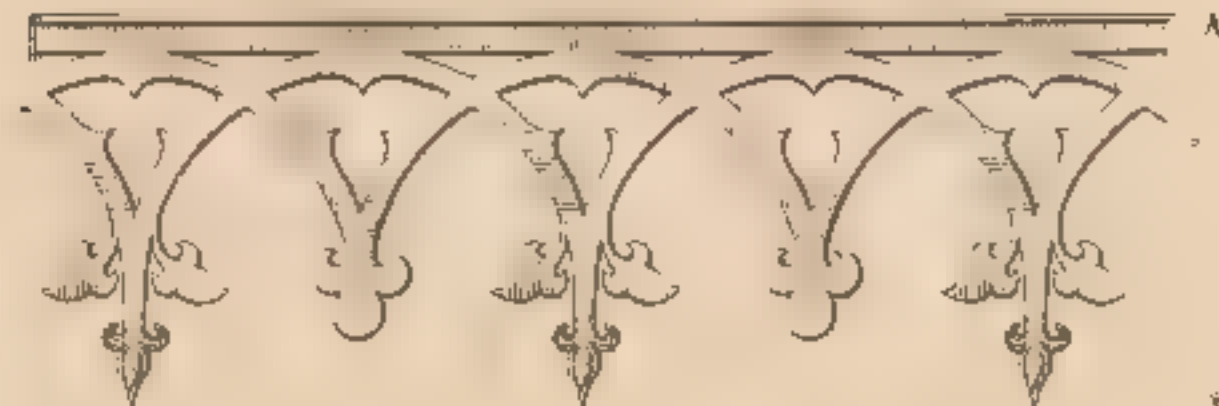
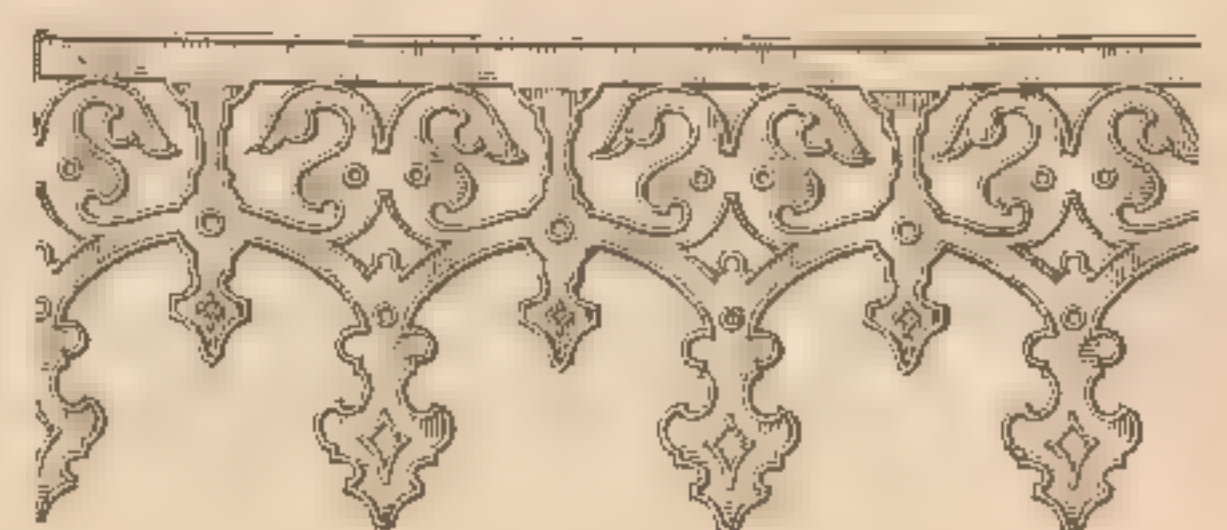
No 54



No 52



SCALE INCH = 1 FOOT

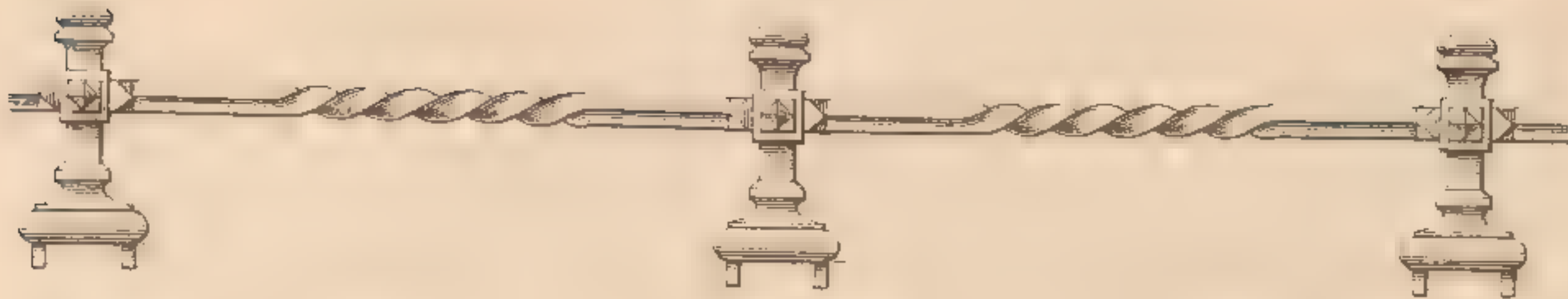
N^o 35N^o 65N^o 47N^o 72N^o 89N^o 32N^o 37N^o 34N^o 35N^o 8N^o 89N^o 9

The above illustrates some of our Drip Frieze patterns, many other of our designs are equally suitable.

SCALE INCH 1 FOOT

MACFARLANE'S RAILING &c

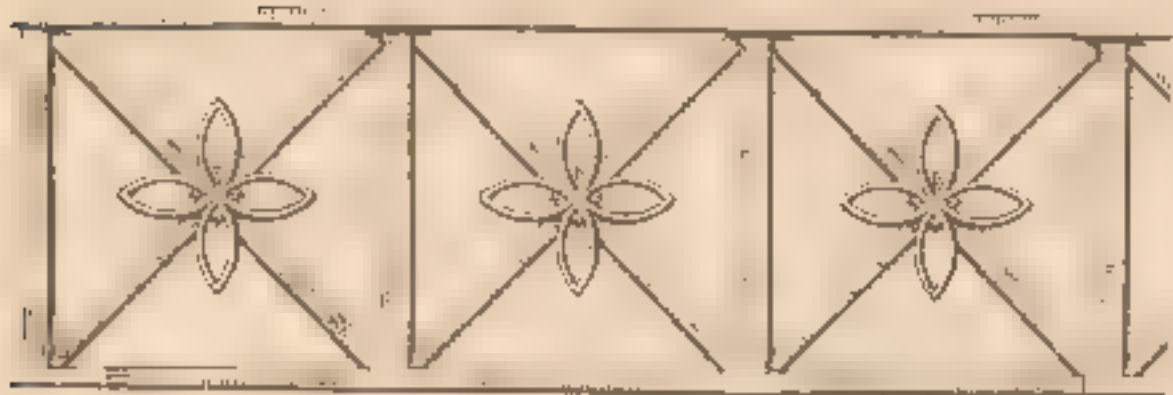
Nº 77



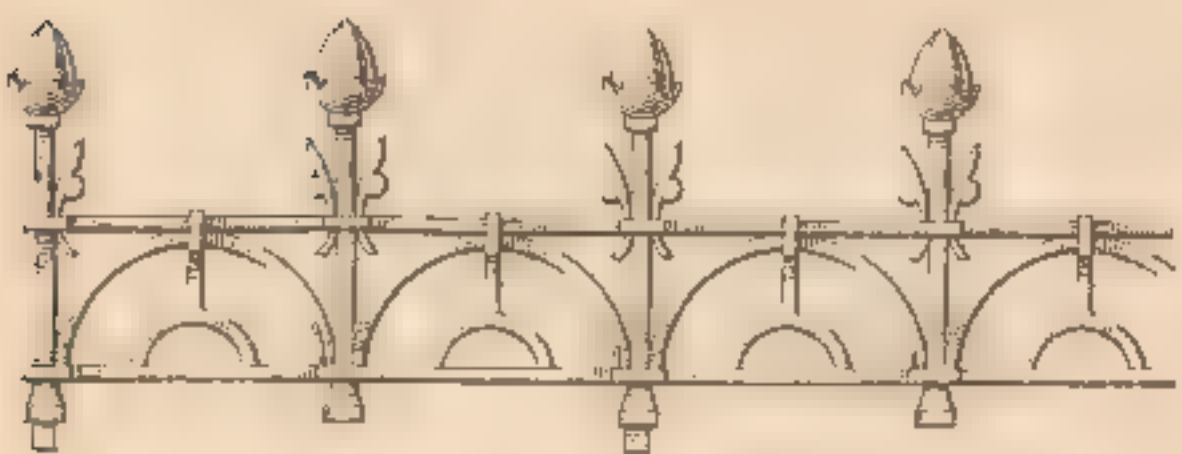
Nº 34



Nº 3



Nº 8



Nº 4



Nº 5



A F 5 7

Nº 3



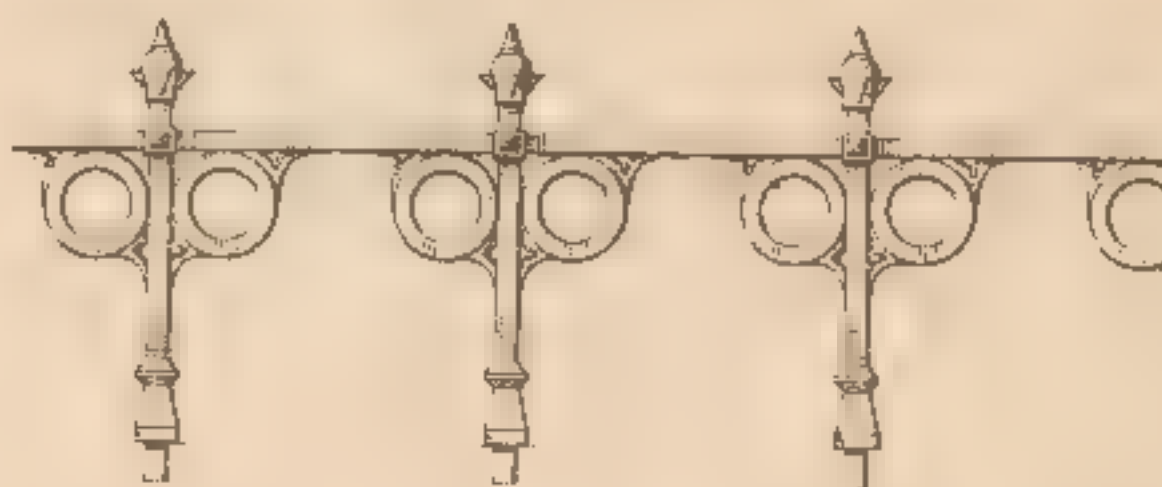
Nº 8



Nº 24



Nº 74



APR 5



MACFARLANE'S RAILING &c

N. 50

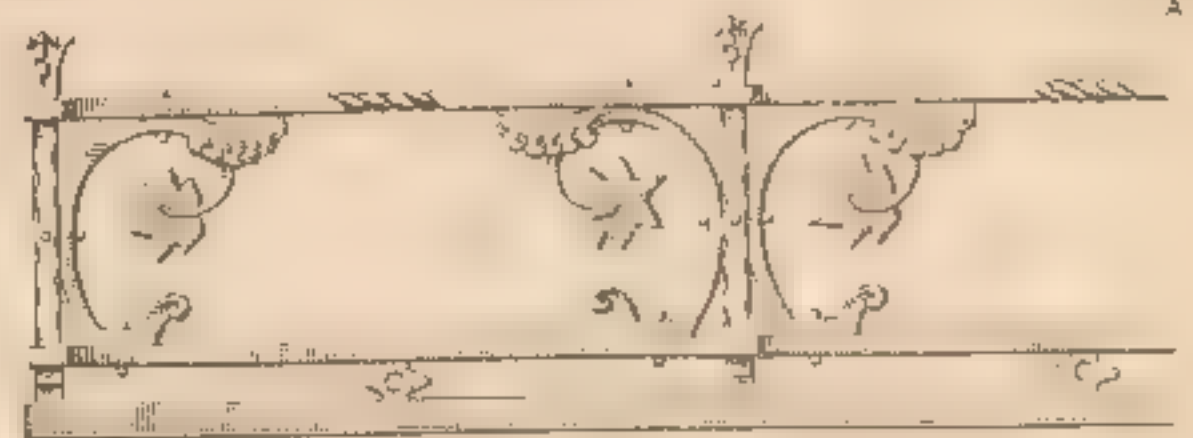


N. 54



N. 44

24
5 R 1/2 x
A



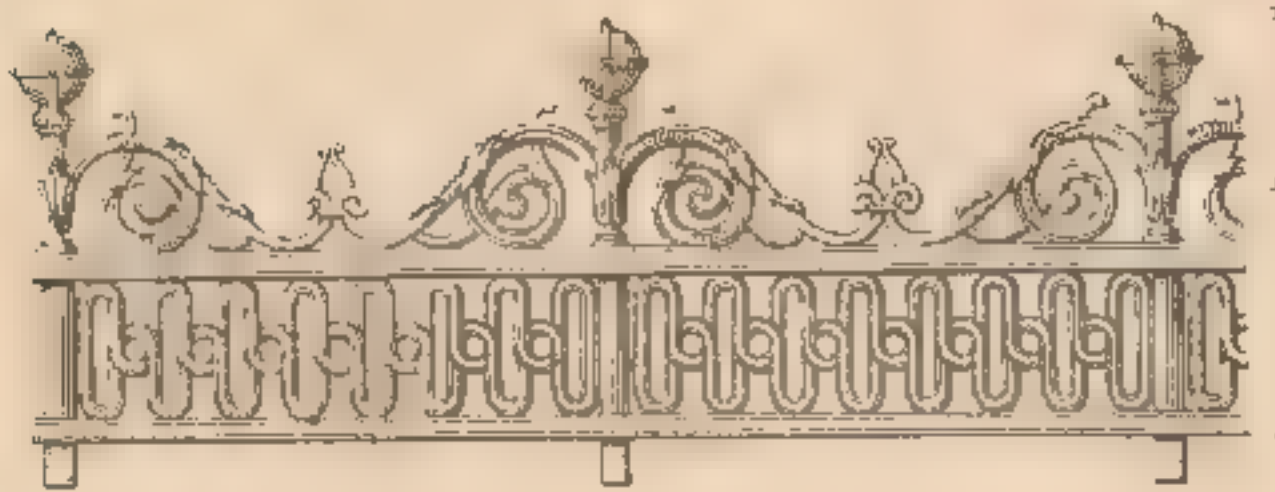
14



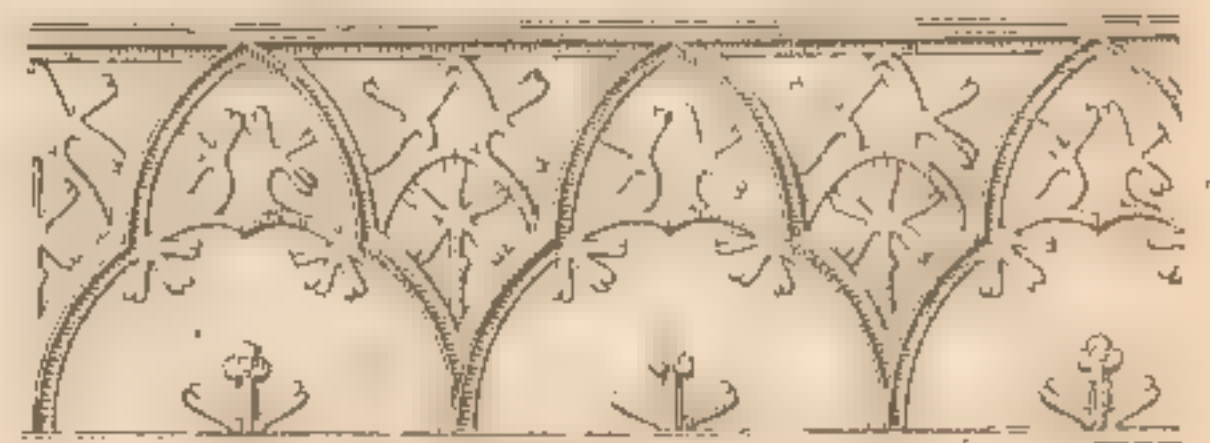
N. 75



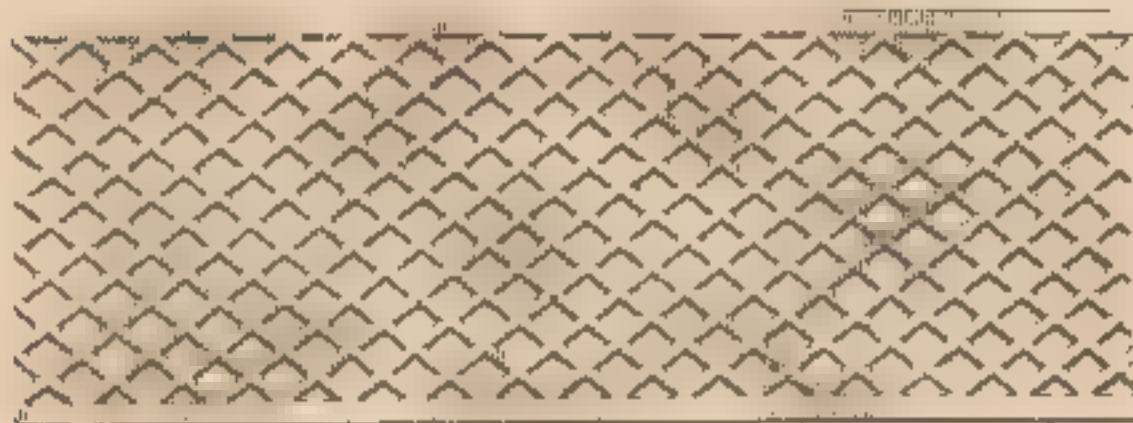
N. 48



N. 4



N. 54



N. 47

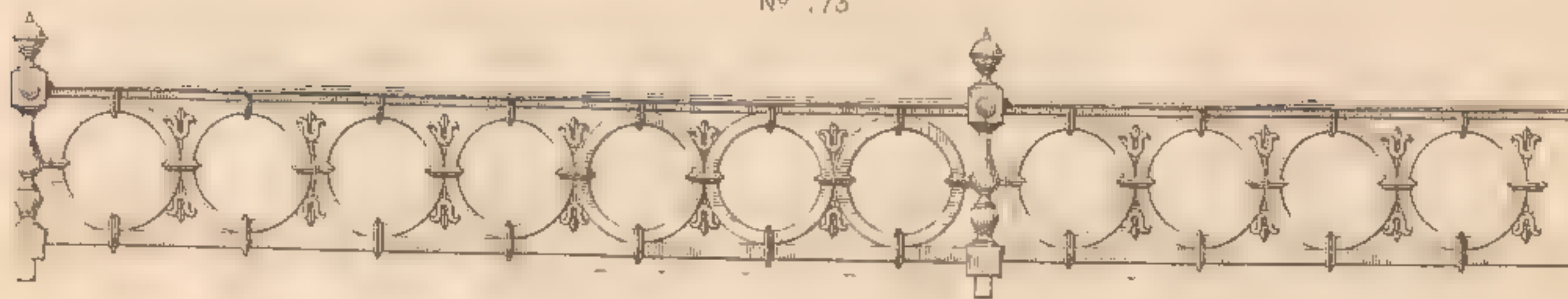
30
3 R 1/2 x
A



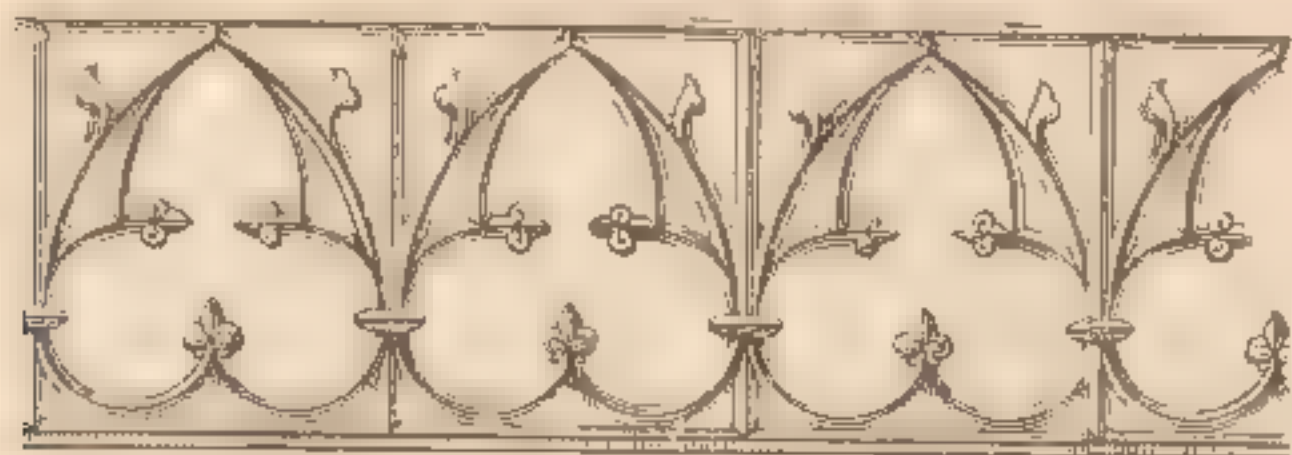
One face

ALFAPLANES RAILING &C

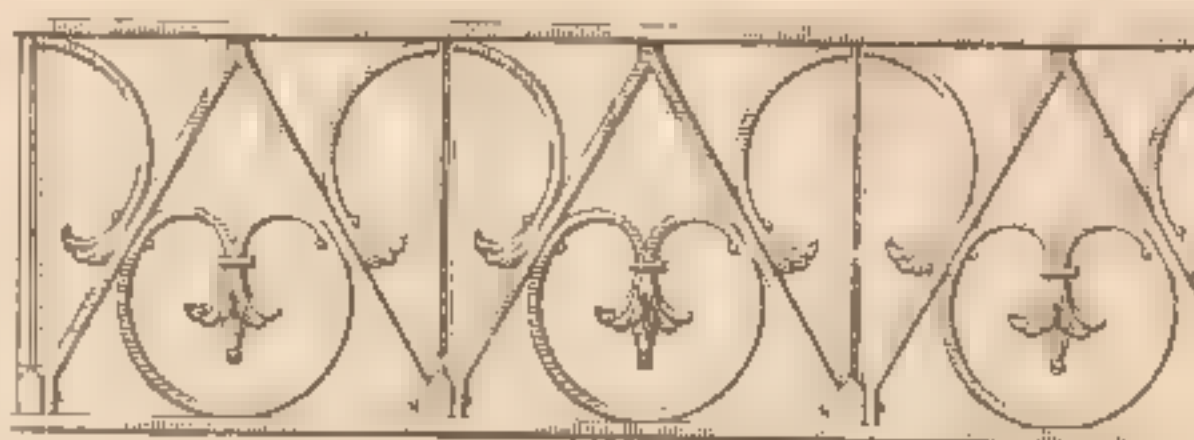
Nº .73



Nº 40



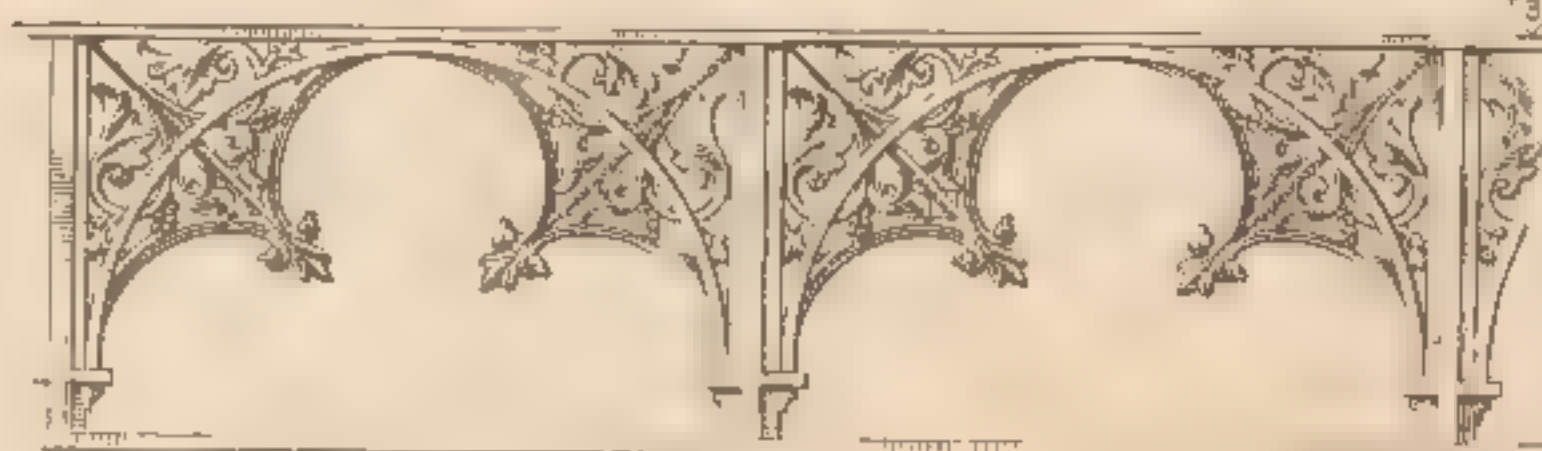
Nº 470



N 303



Nº .18,



Nº 281



Nº 4



Nº 57



Nº 16



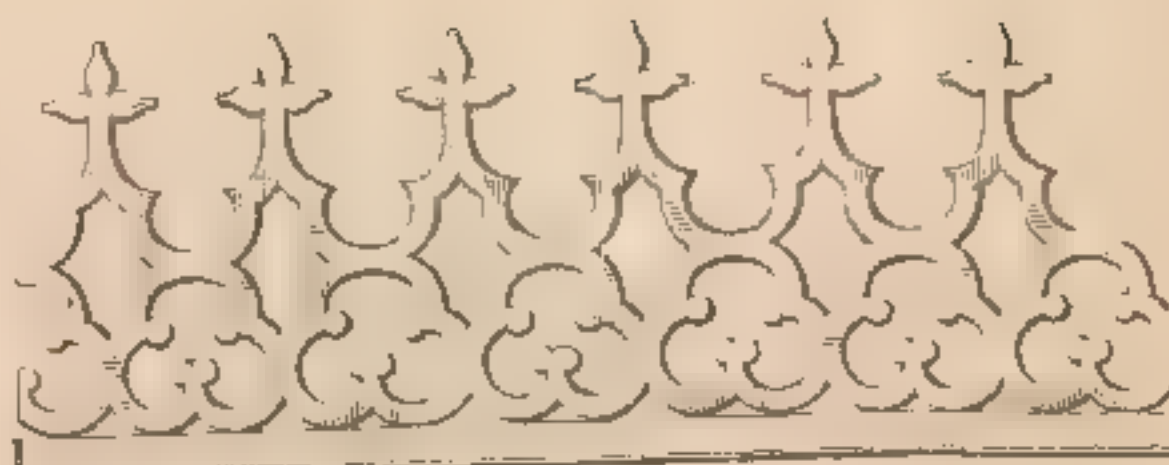
SCALE 1 INCH = FOOT

MACFARLANE'S PATENT

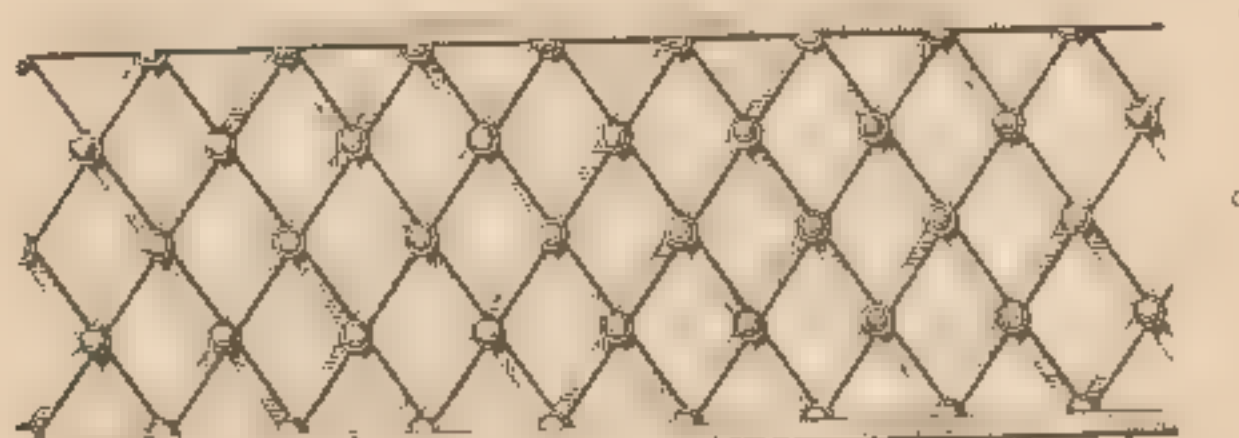
Nº 6



Nº 14

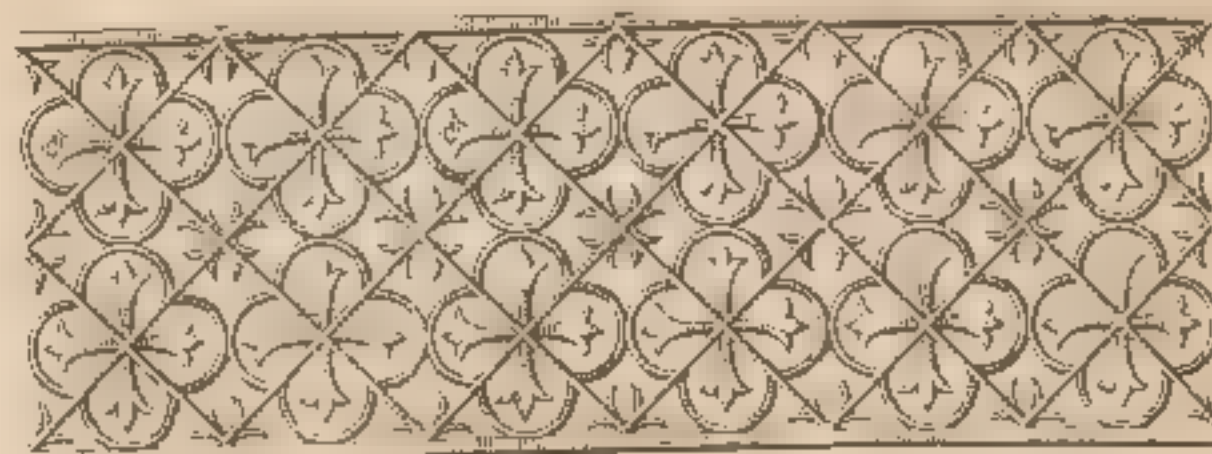


Nº 398



One face

Nº 09

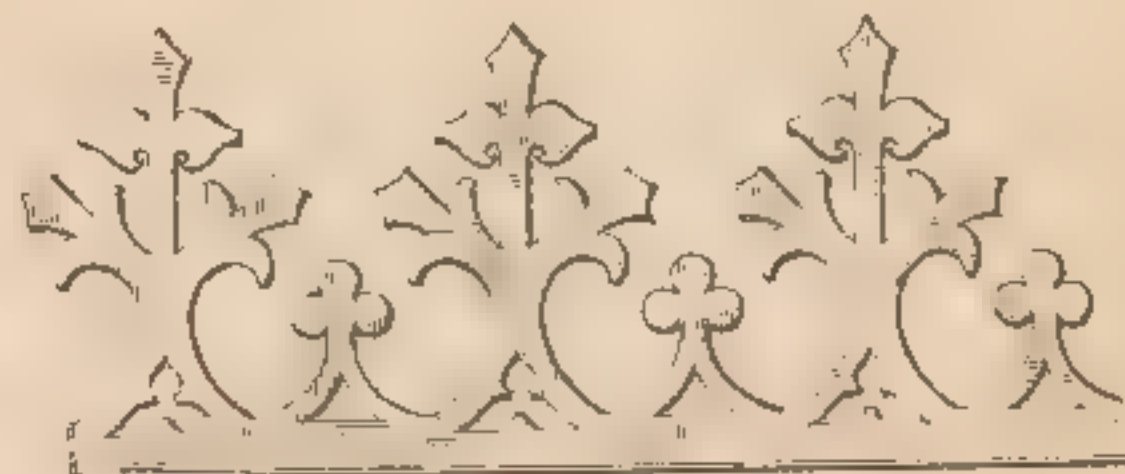


One face

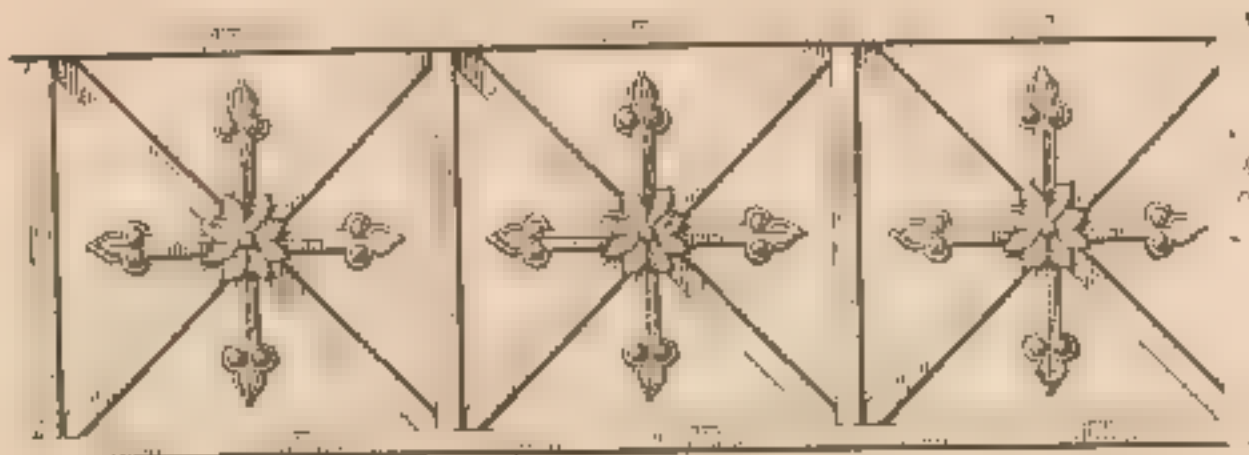
Nº 5



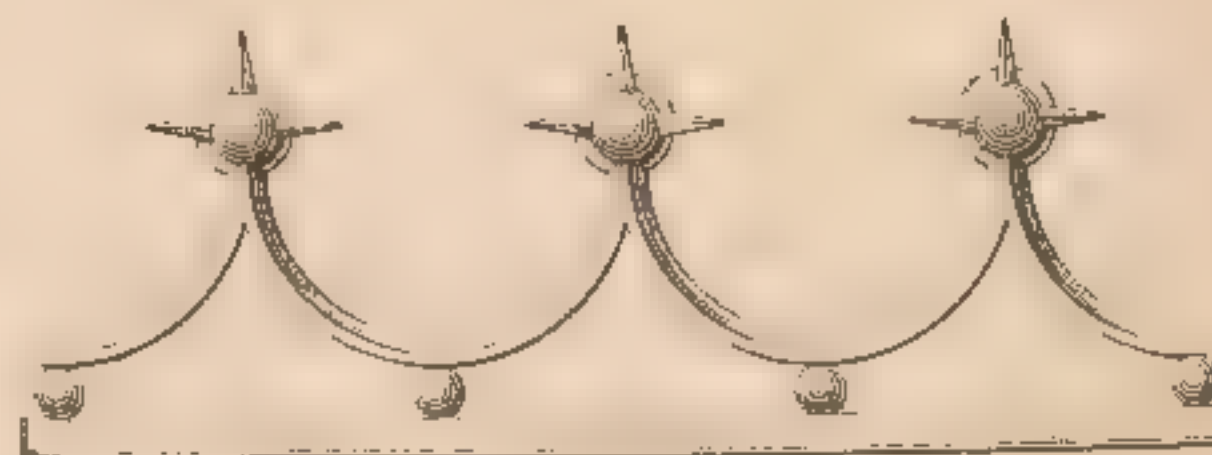
Nº 71



Nº 24



Nº 442



Nº 364

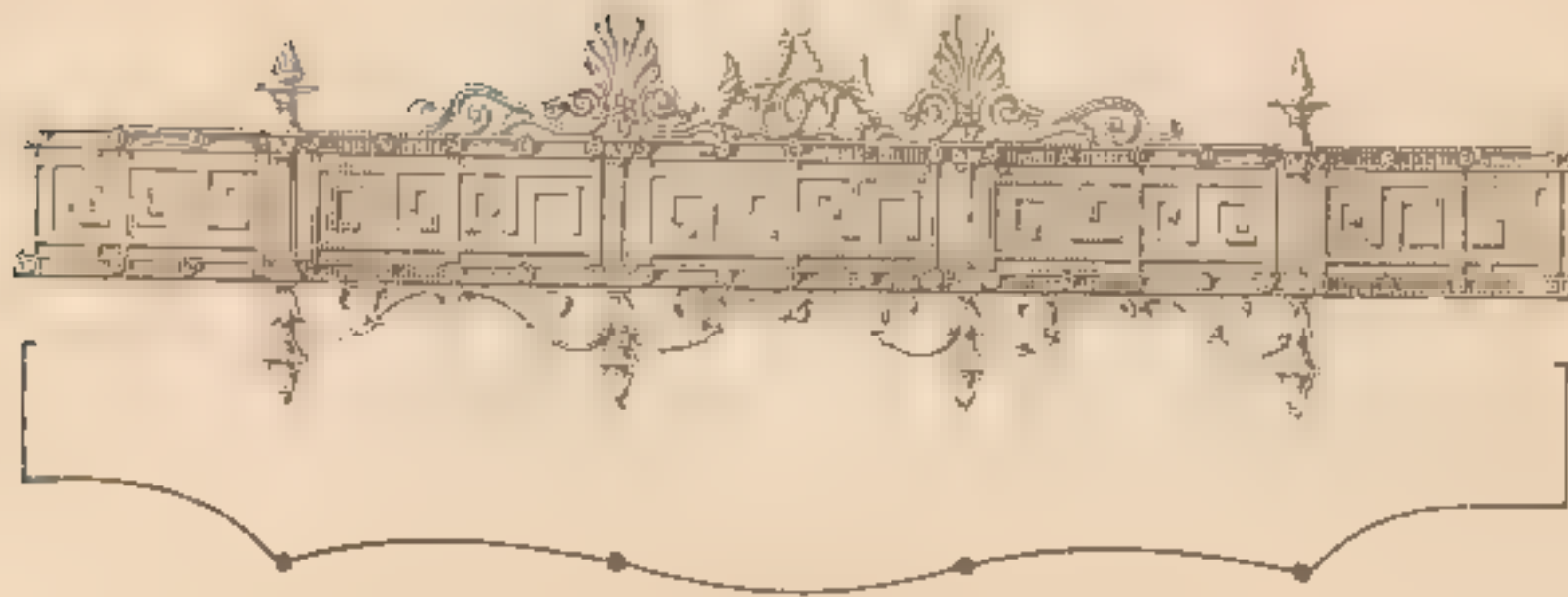


Nº 66



MACFARLANE'S RAILING &C

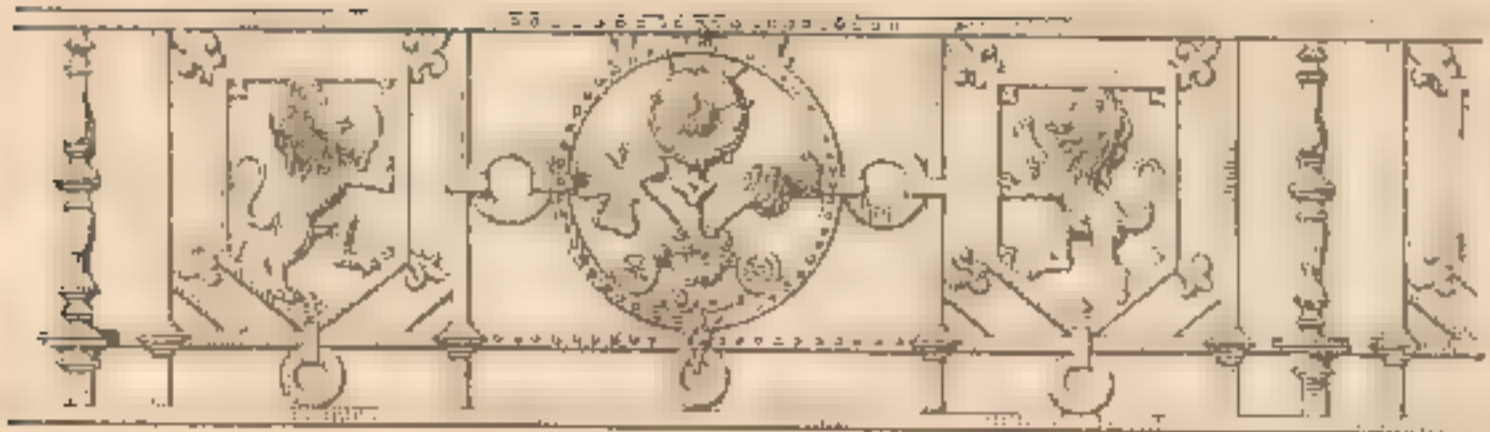
No 52



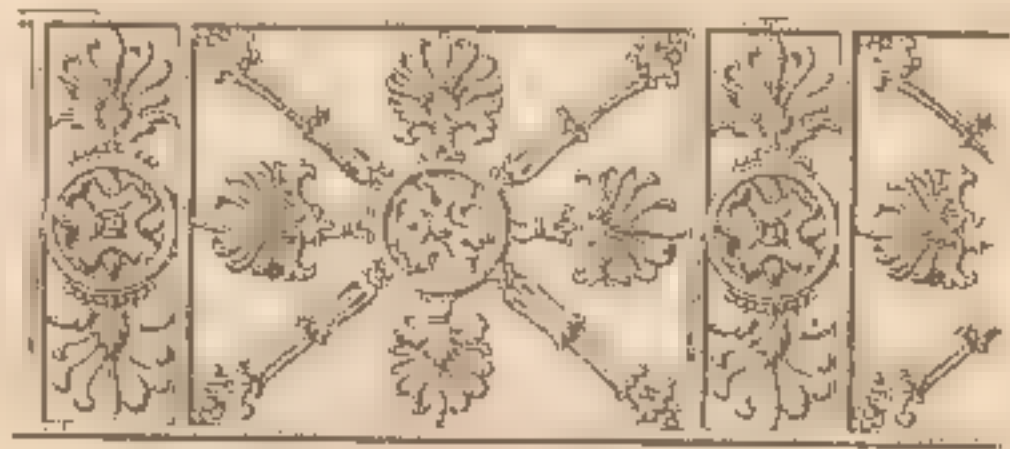
4' 0", 4' 3" and 4' 6" long. Other sizes to order.

No 53

No 54



One face



No 55

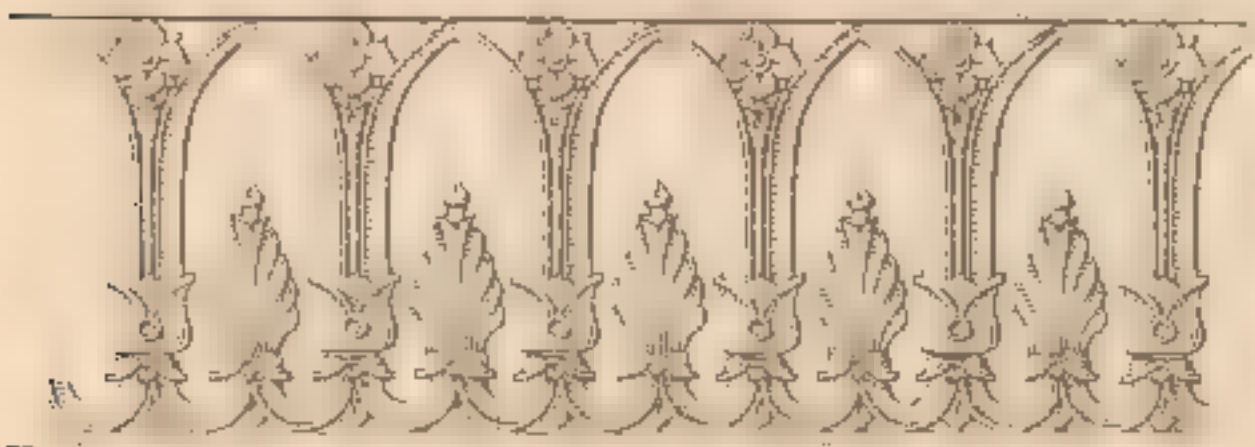
No 56



No 57



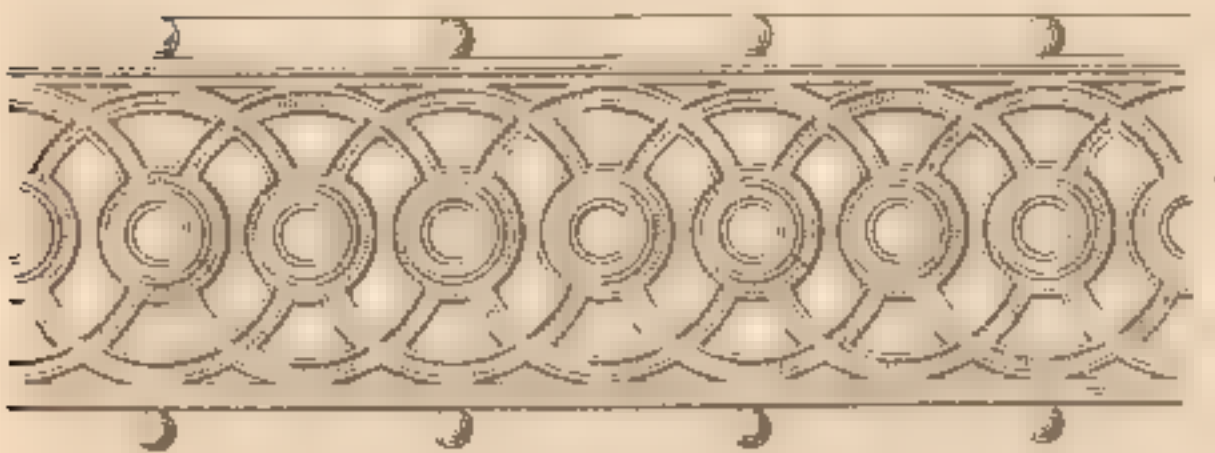
No 58



No 60



No 62



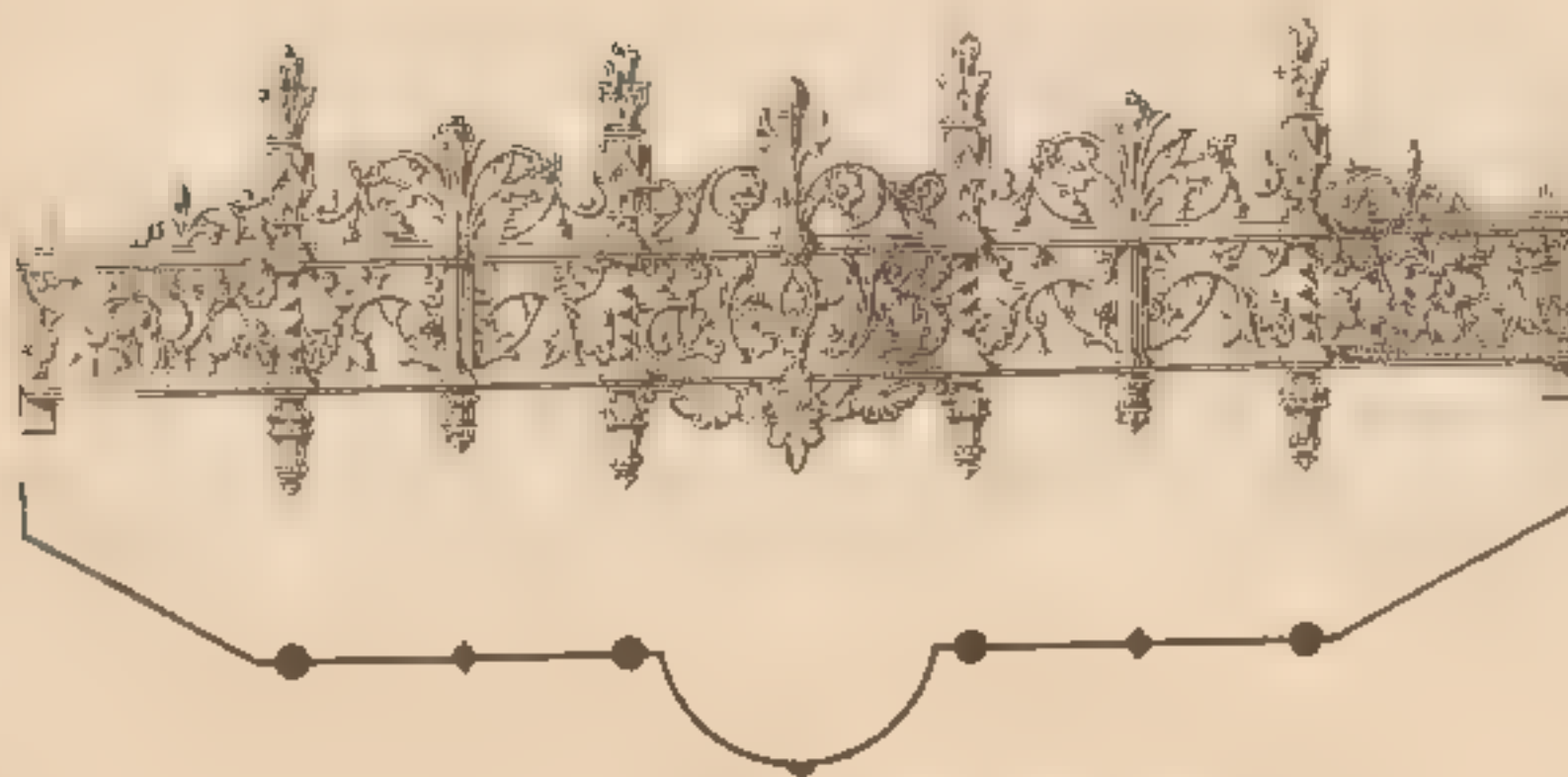
One face



SCALE 1 INCH = FOOT

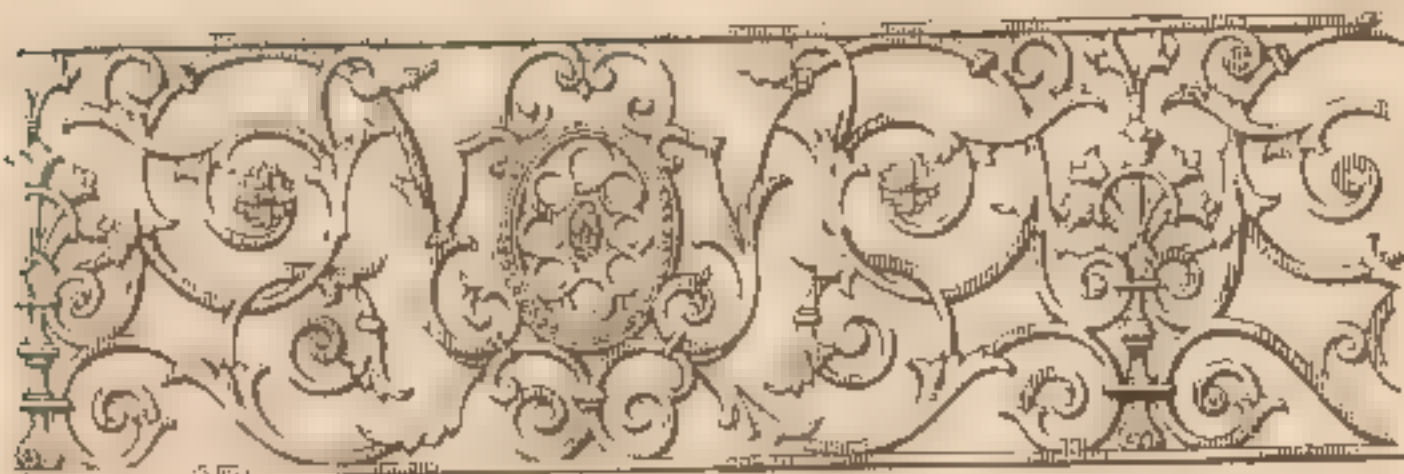
MA FARLANE'S RAILING &

N^o 49

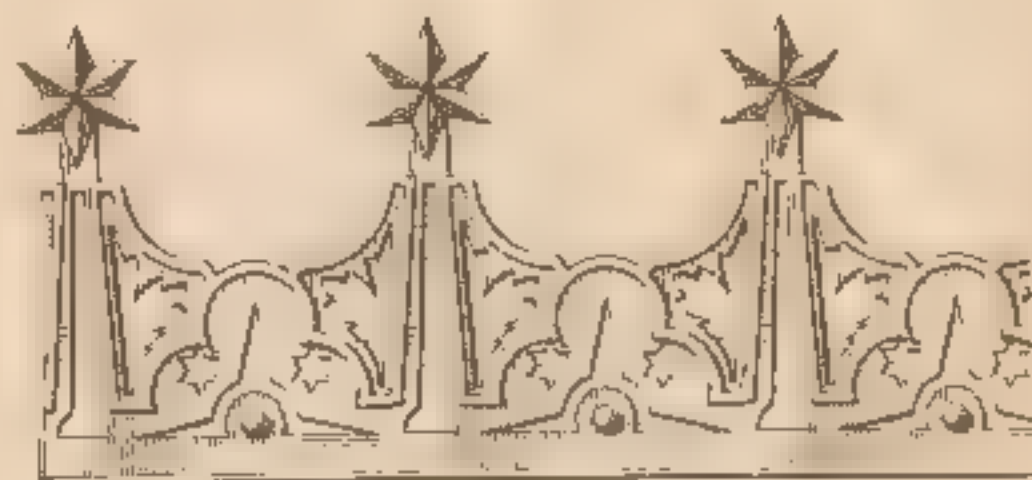


4 or 4 3" and 4 6" long Other sizes to order.

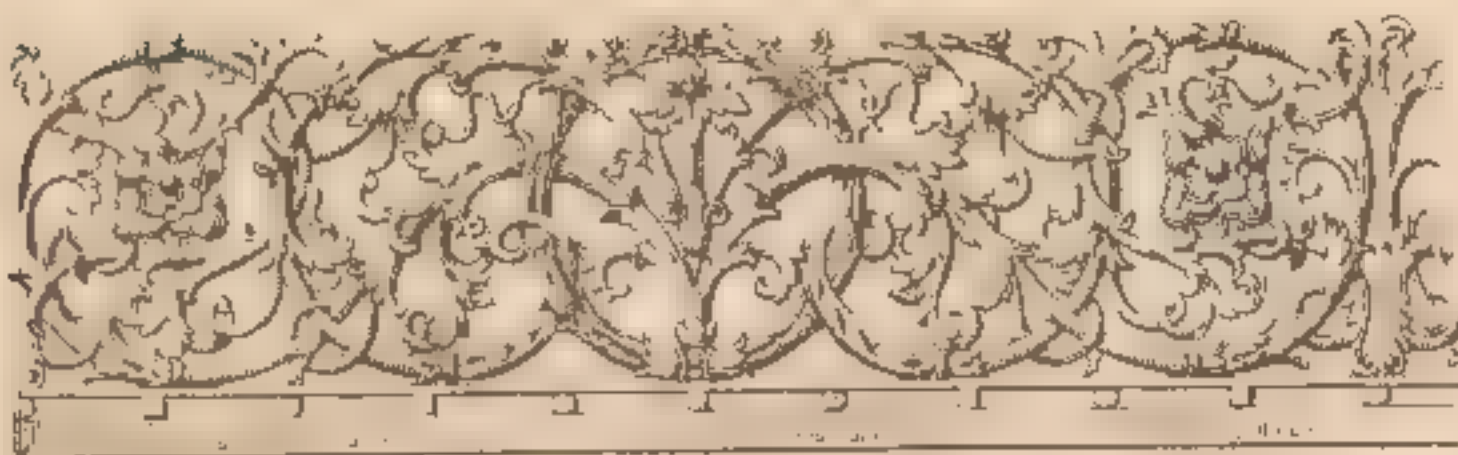
N 457



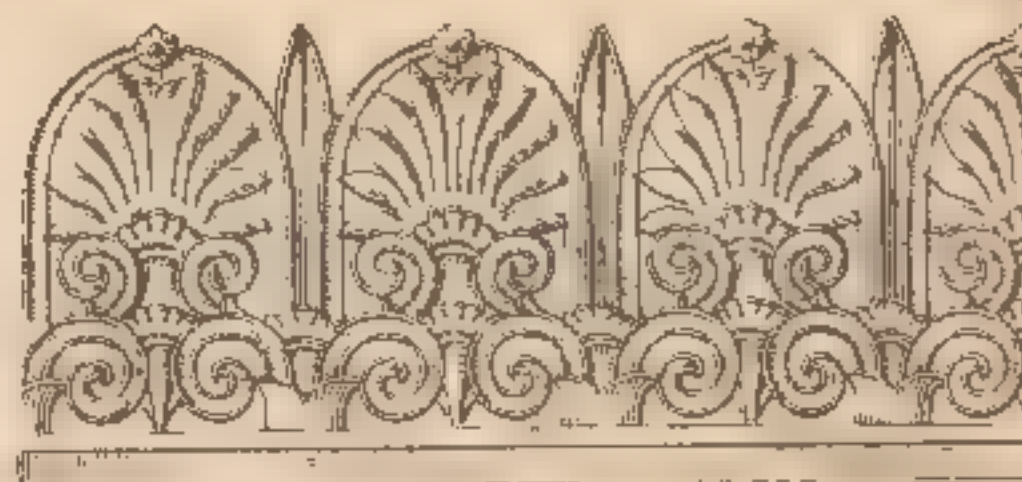
N 18



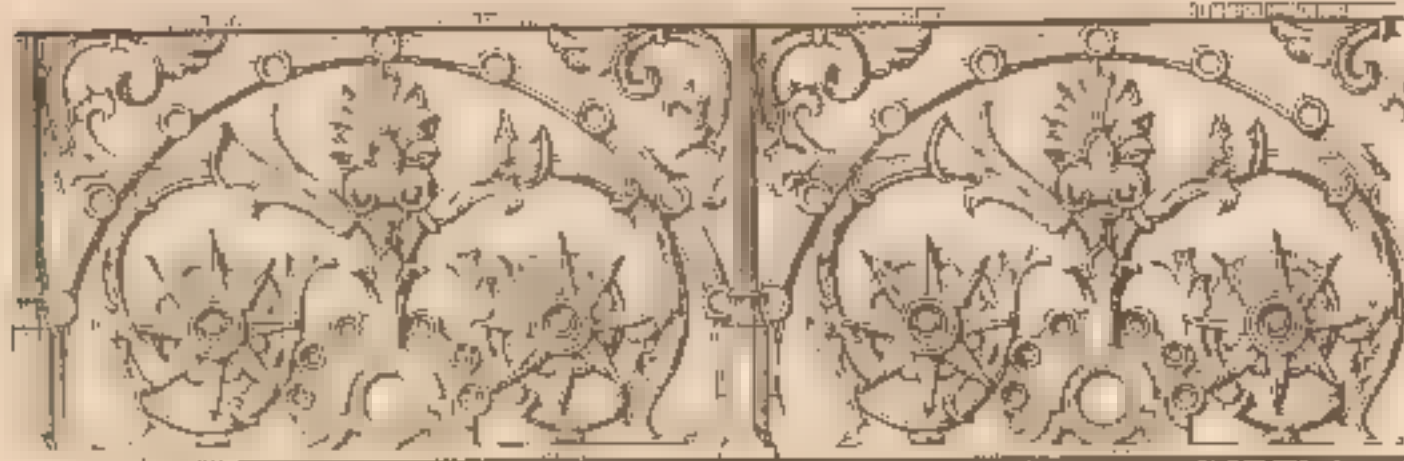
N 33



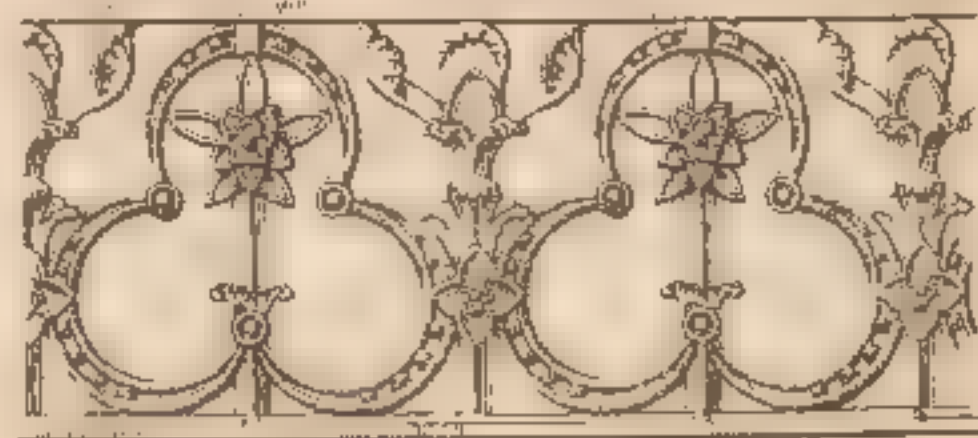
N 5



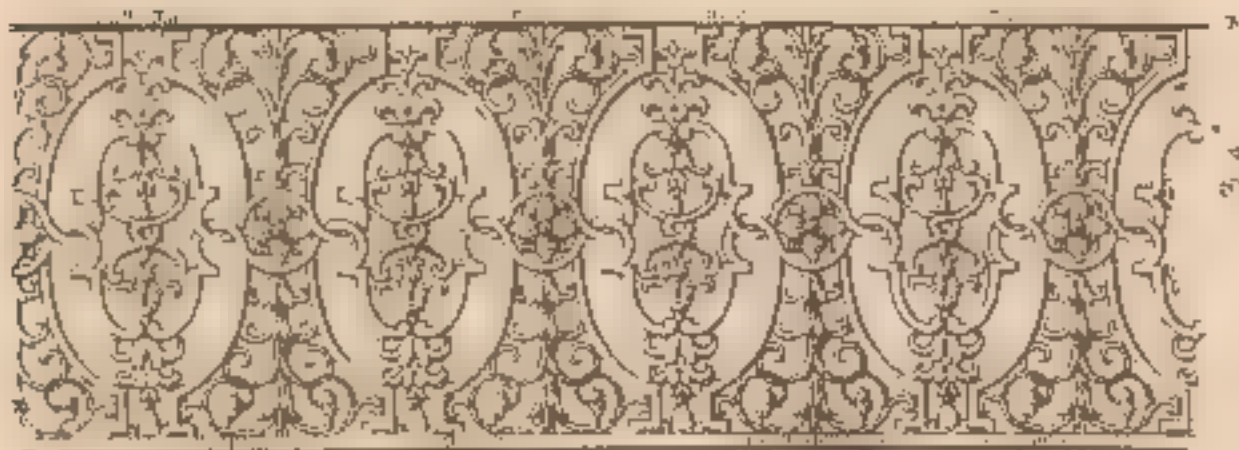
N 68



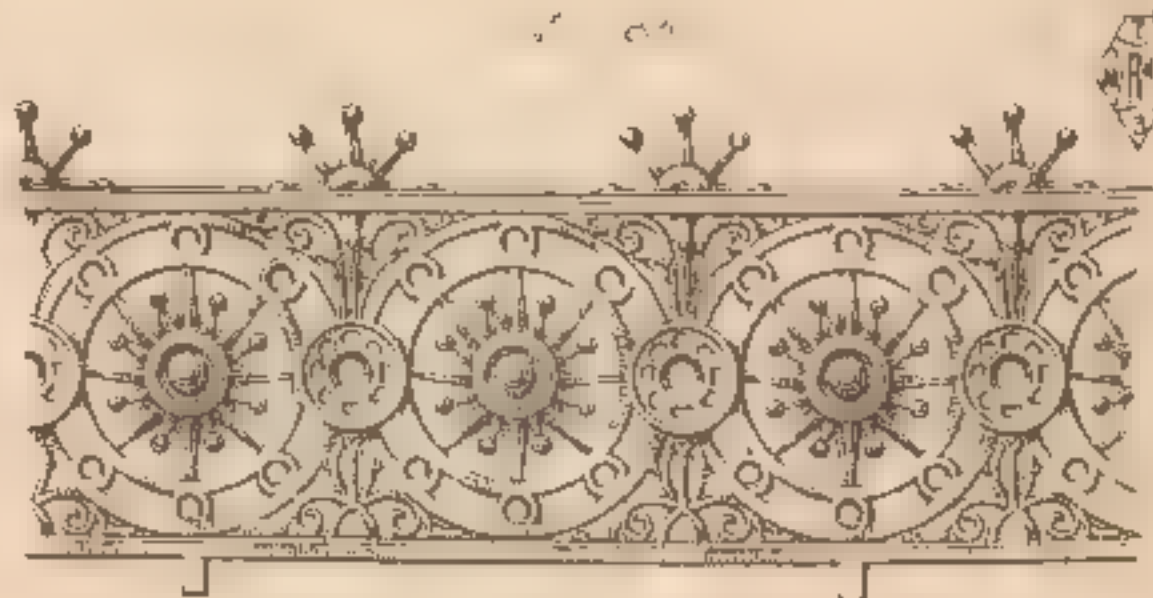
N 2



N 46



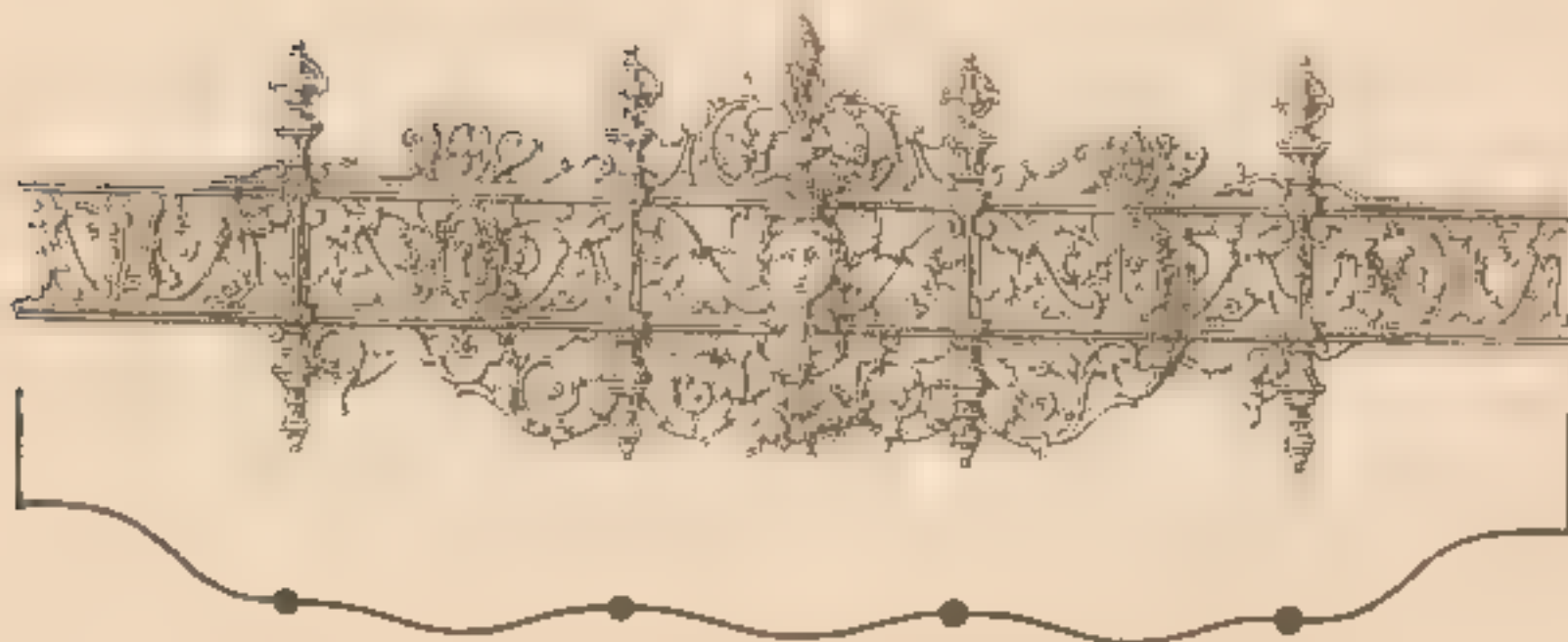
One face



SCALE INCHES FEET

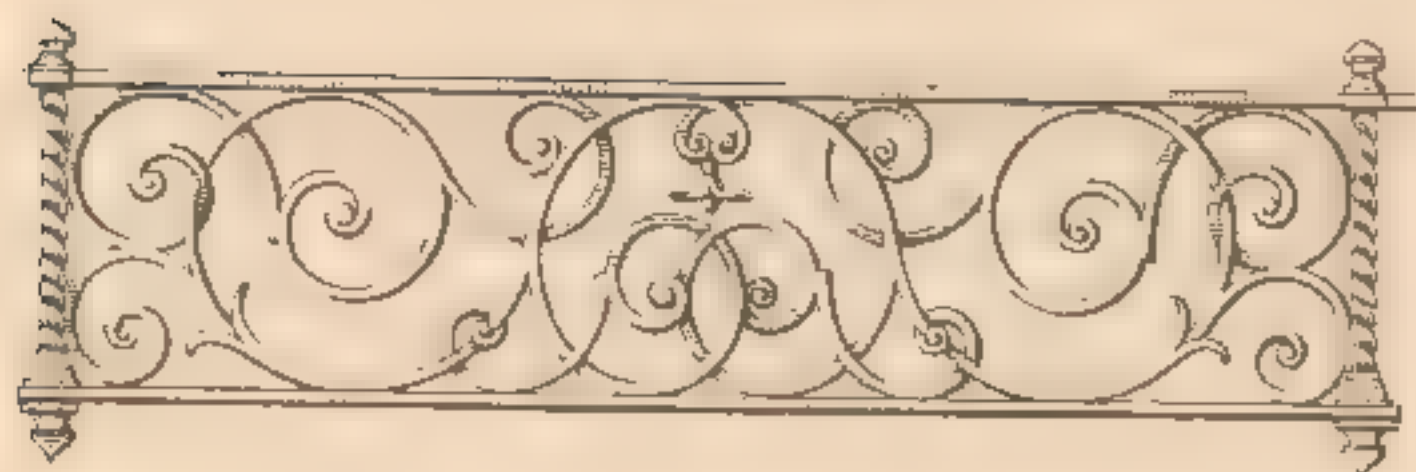
MACFARLANE'S RAILING &

No 60



4' 0", 4' 3" and 4' 6" long. Other sizes to order.

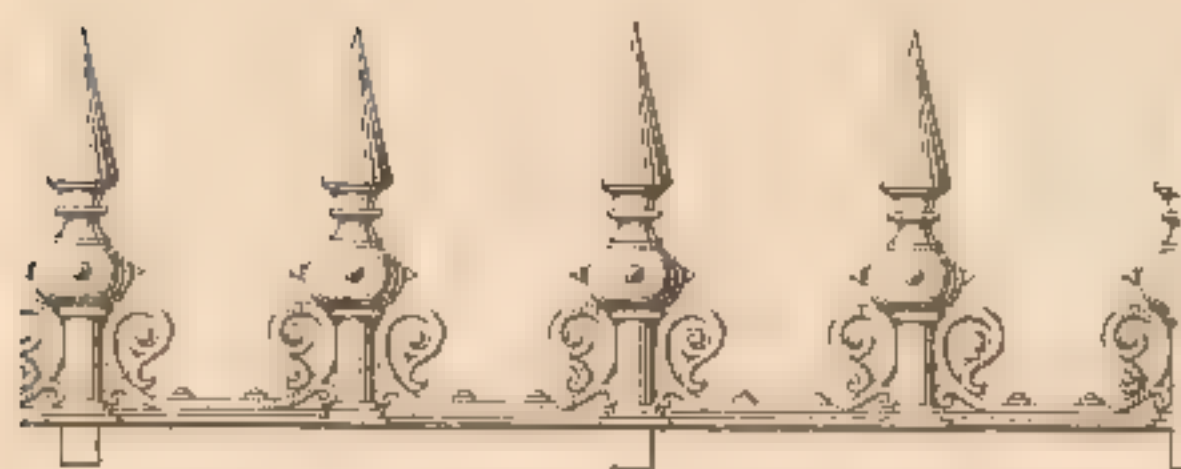
No 282



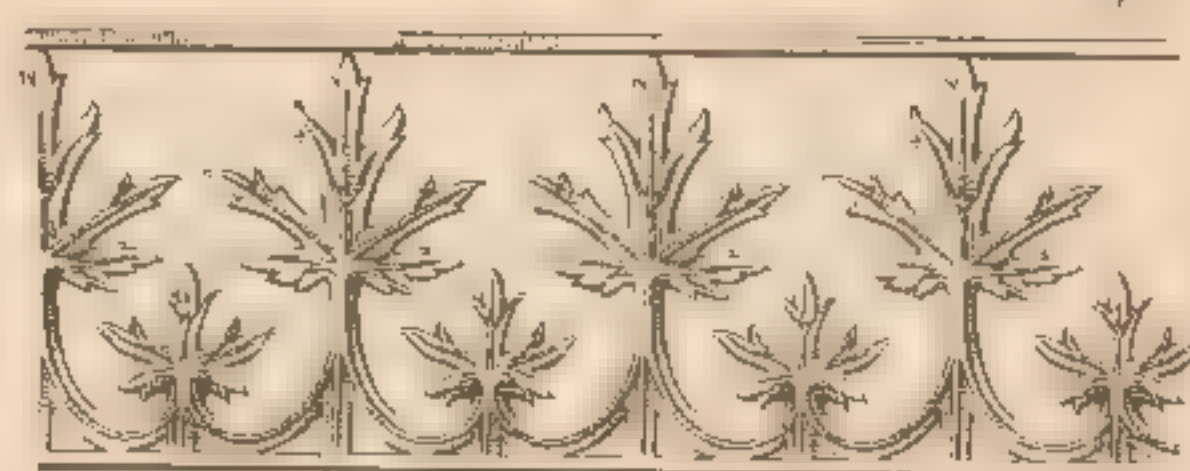
No 48



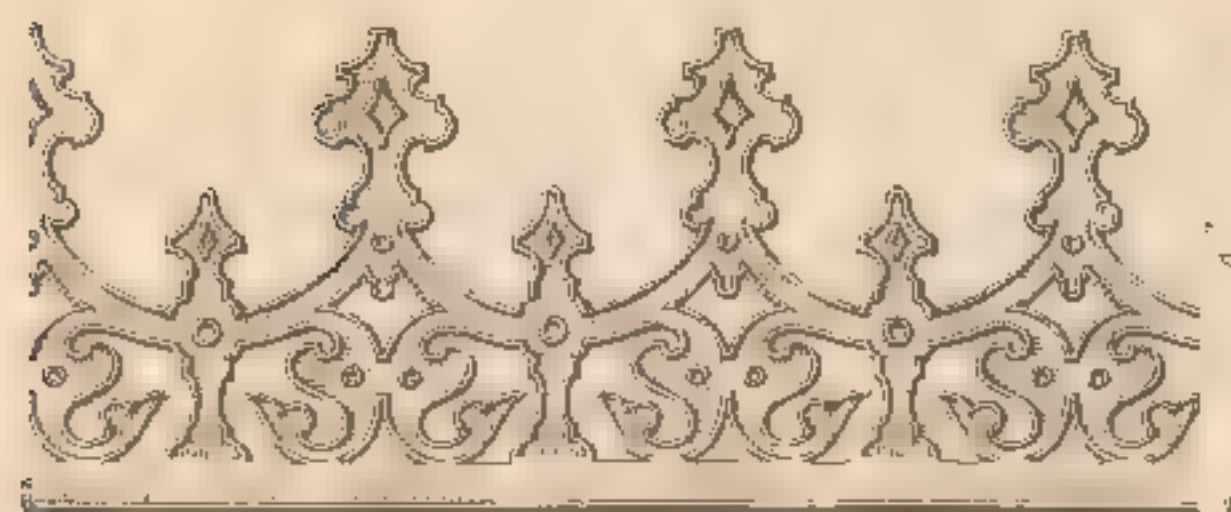
No 464



No 67



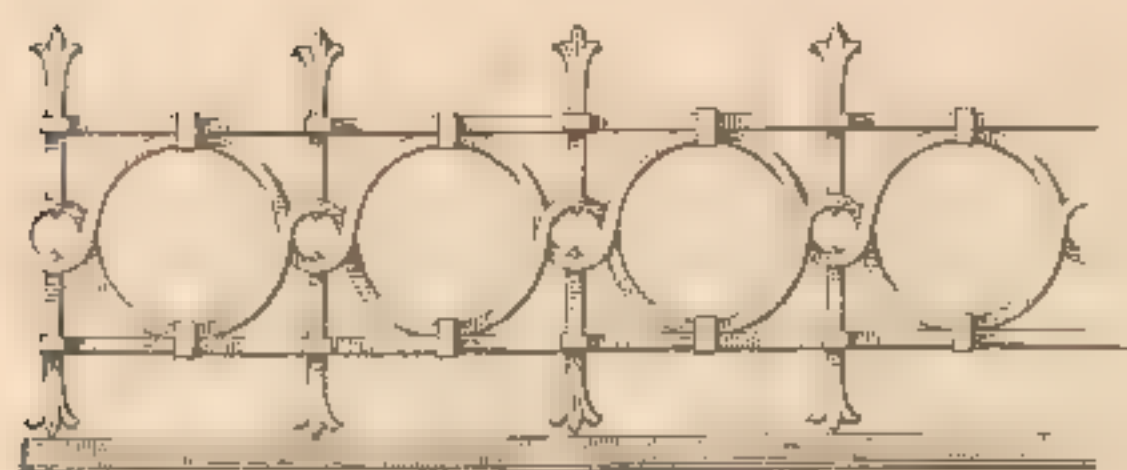
No 4



No 89



No 47



No 28



SCALE | INCH — | FOOT

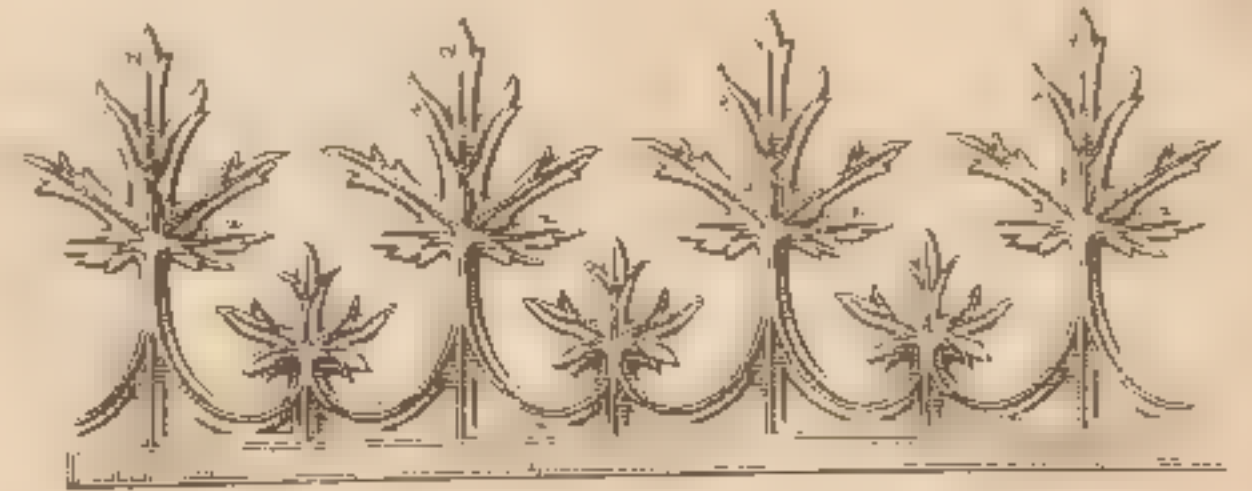
MACFARLANE'S RAILING & C

N^o 94

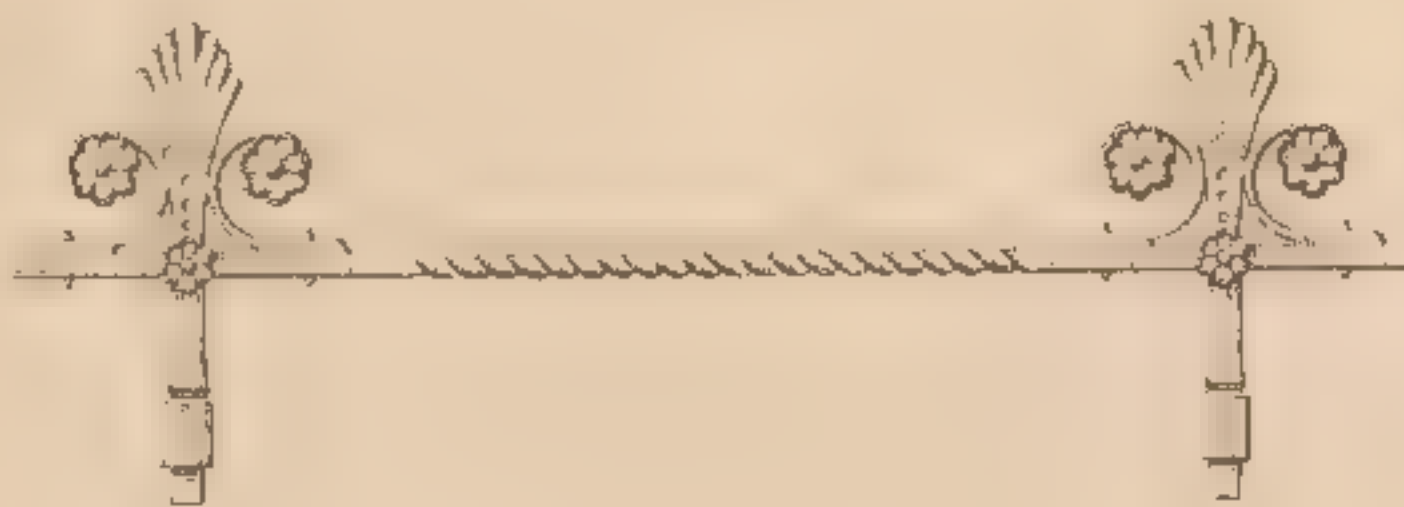


N^o 65

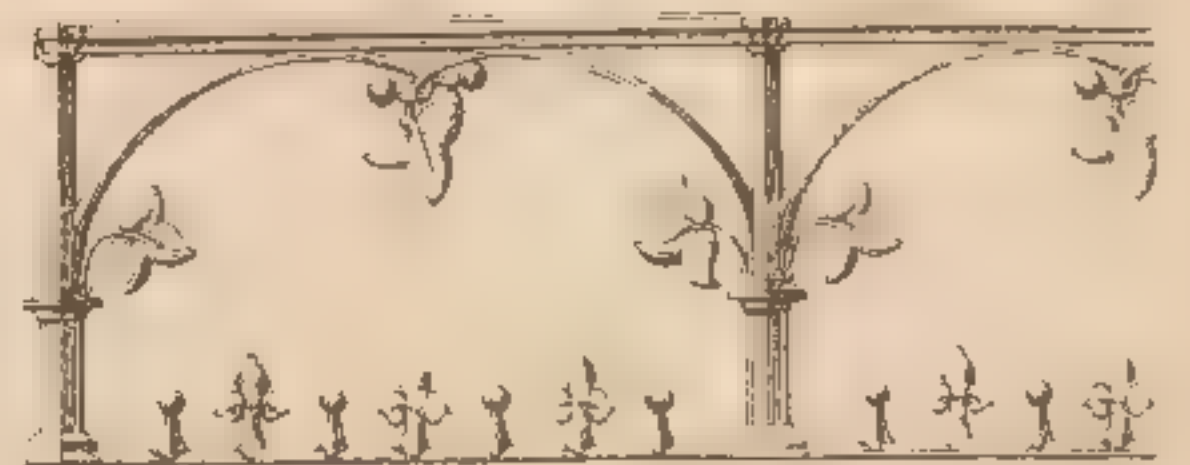
E R 5
7



N^o 98

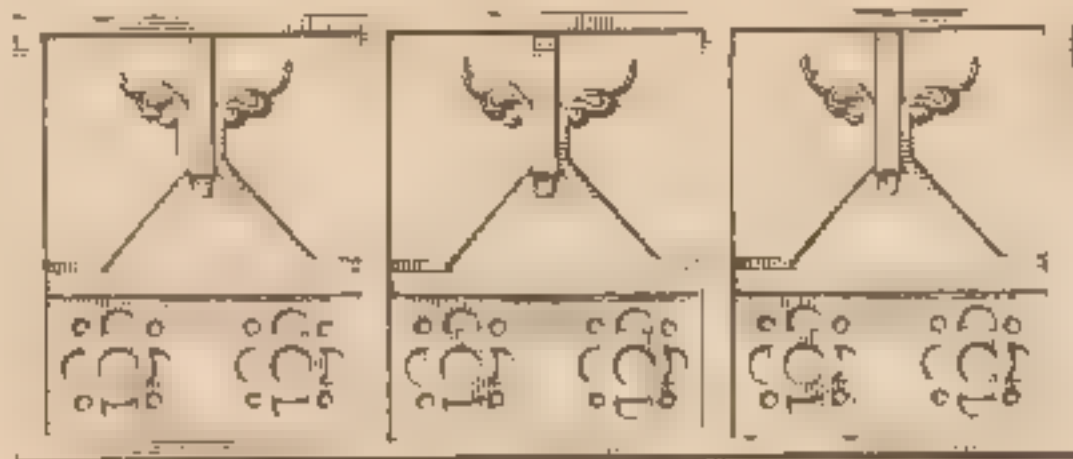


N^o 49

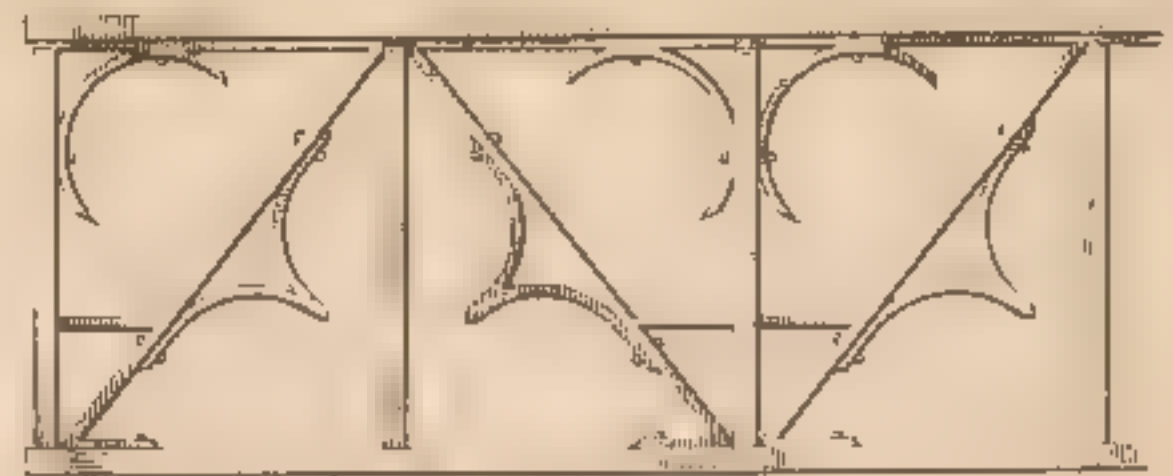


N^o 9

5 ft 8 in



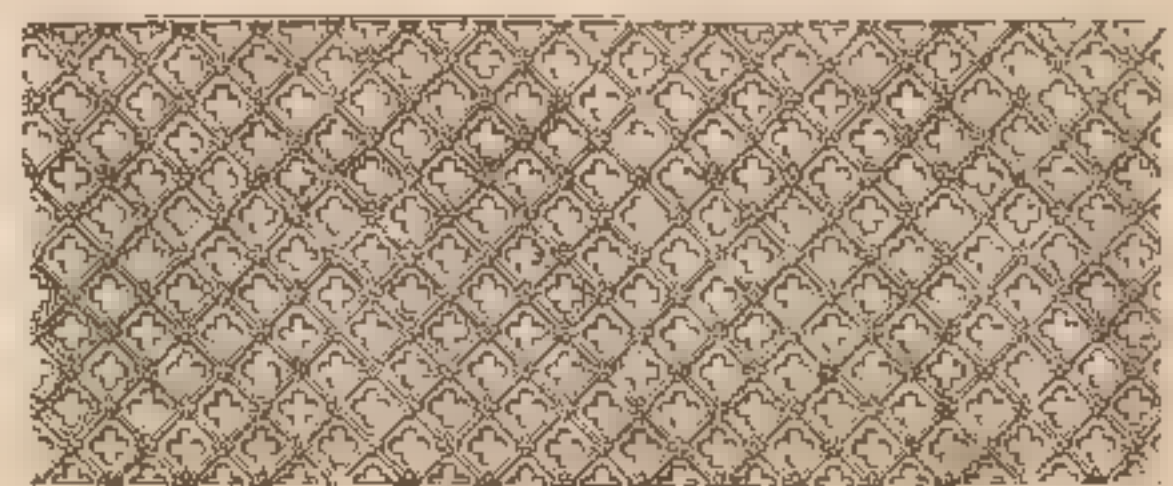
N^o 2



N^o 38

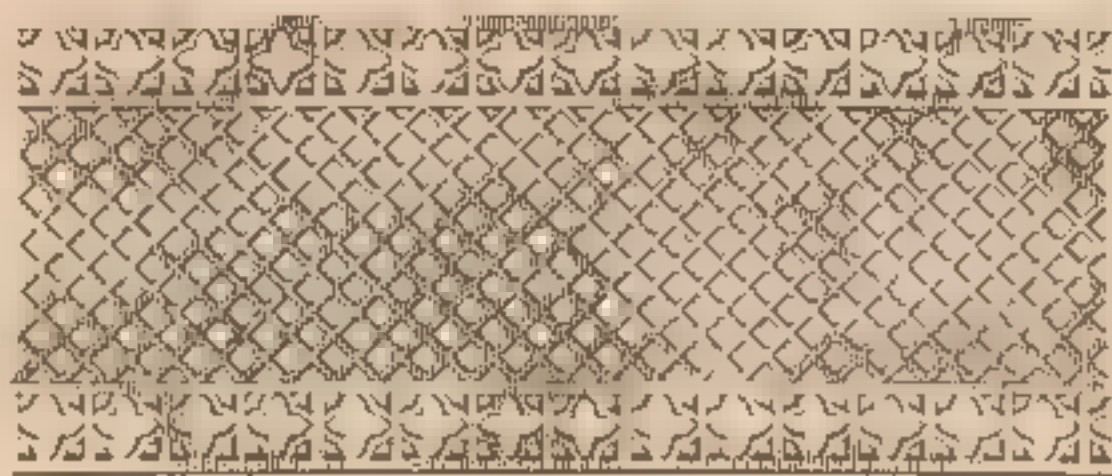


N^o 270

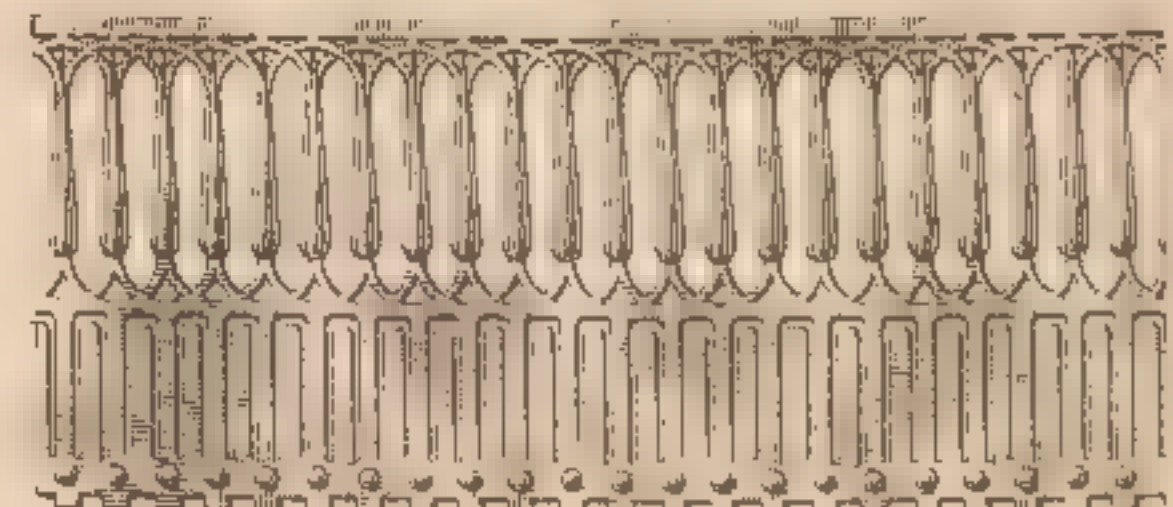


One face

N^o 389



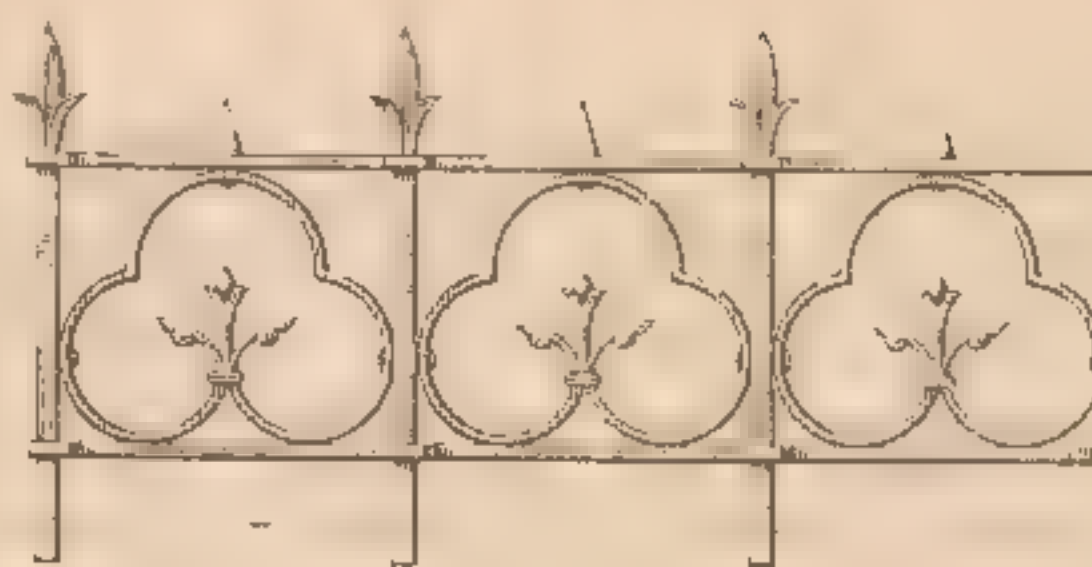
N^o 288



SCALE INCH FOOT

MACFARLANE'S RAILING &c

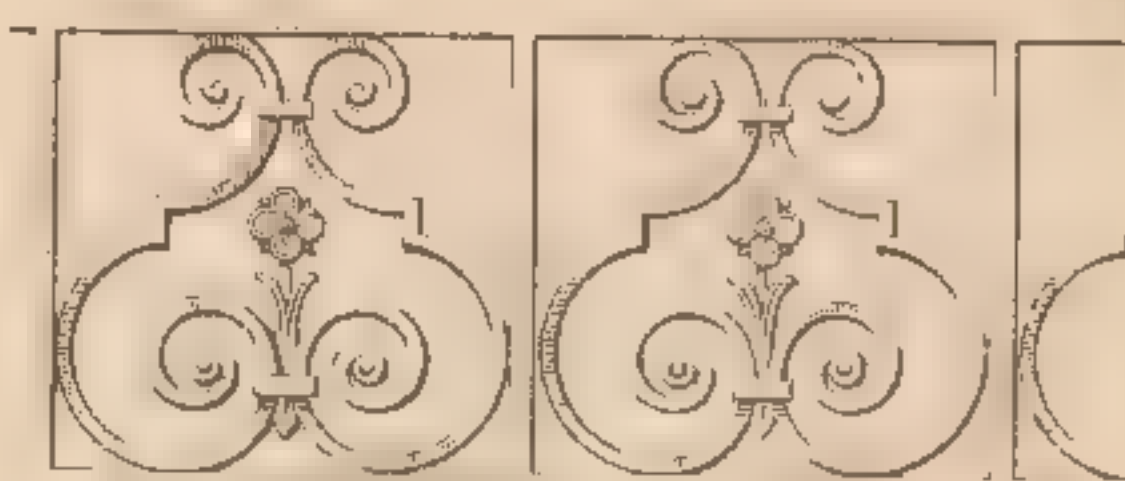
No 0



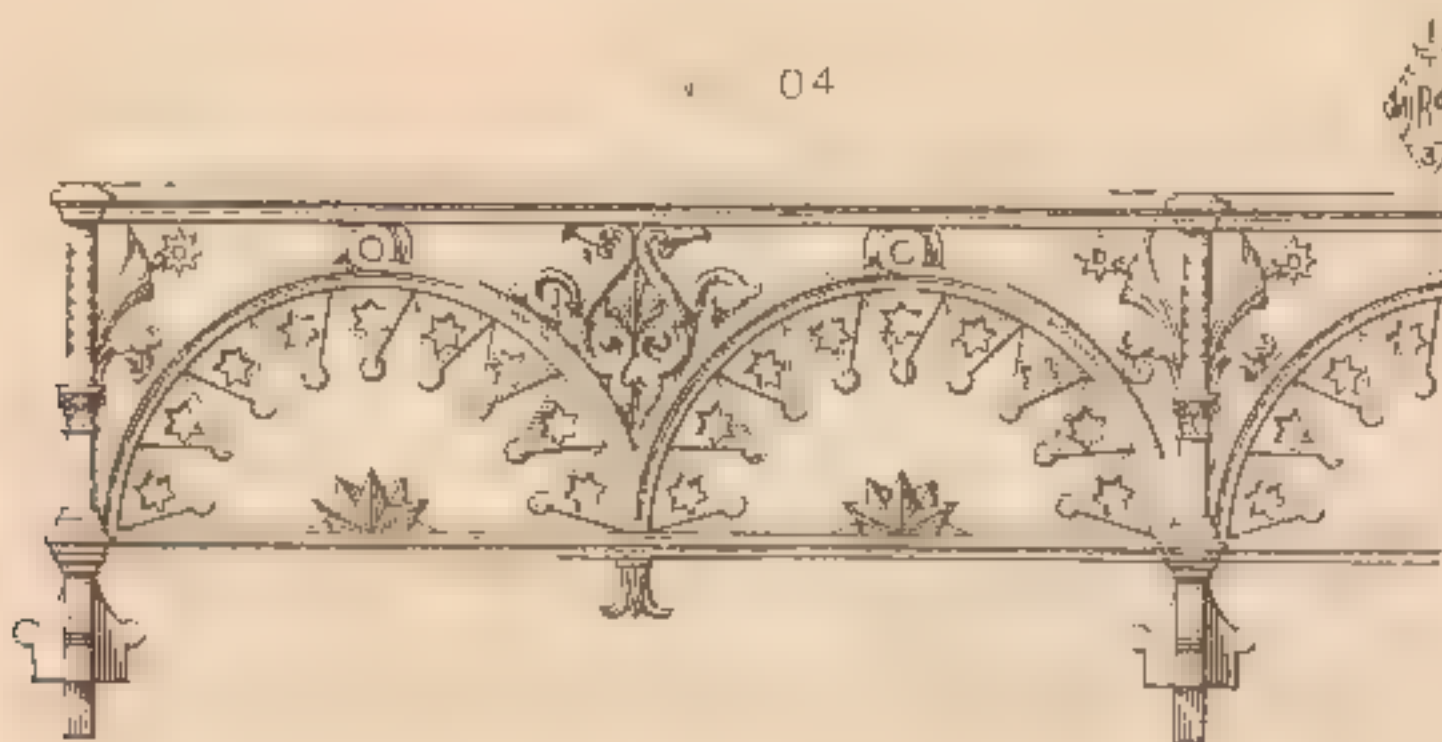
No 45



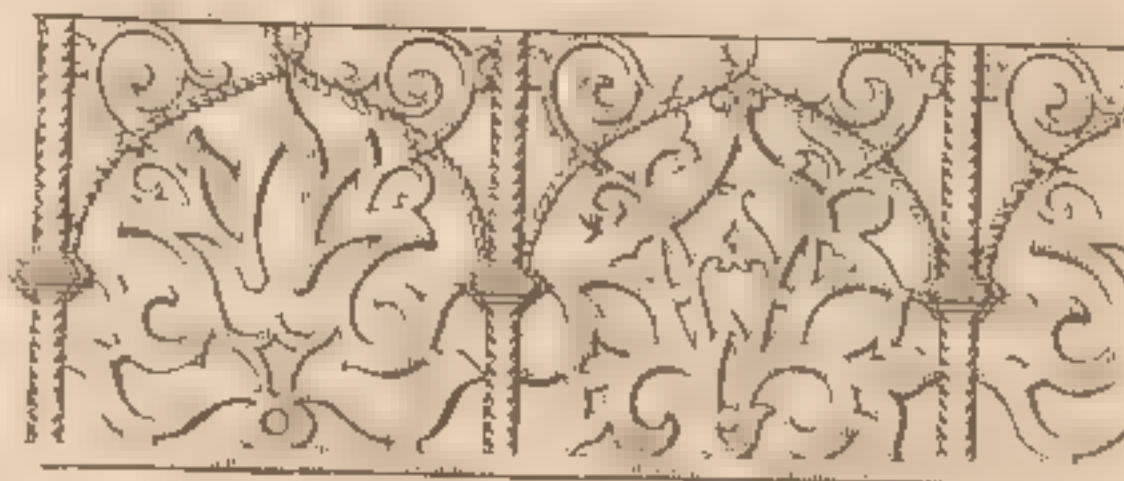
No 4



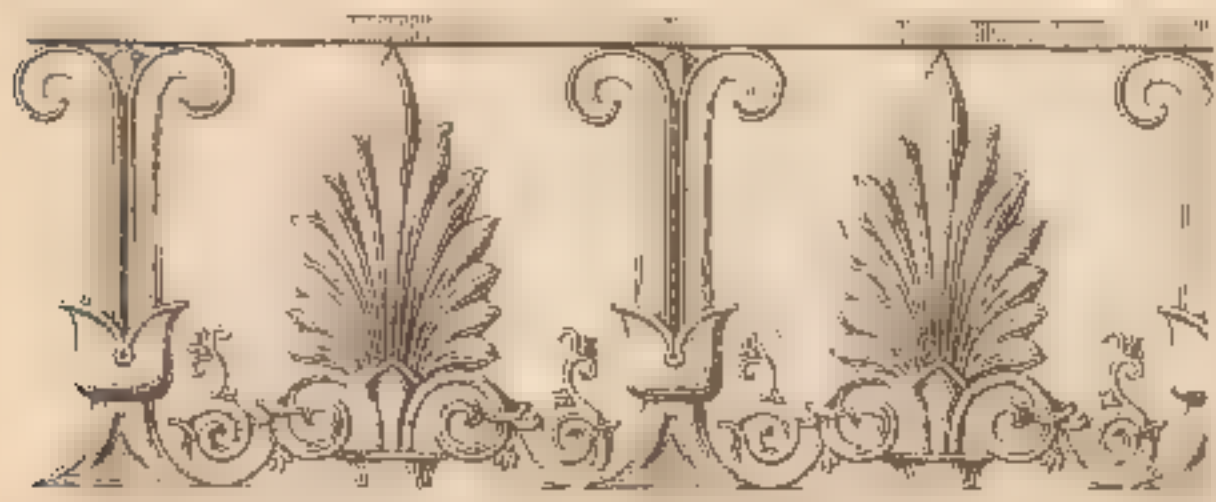
No 04



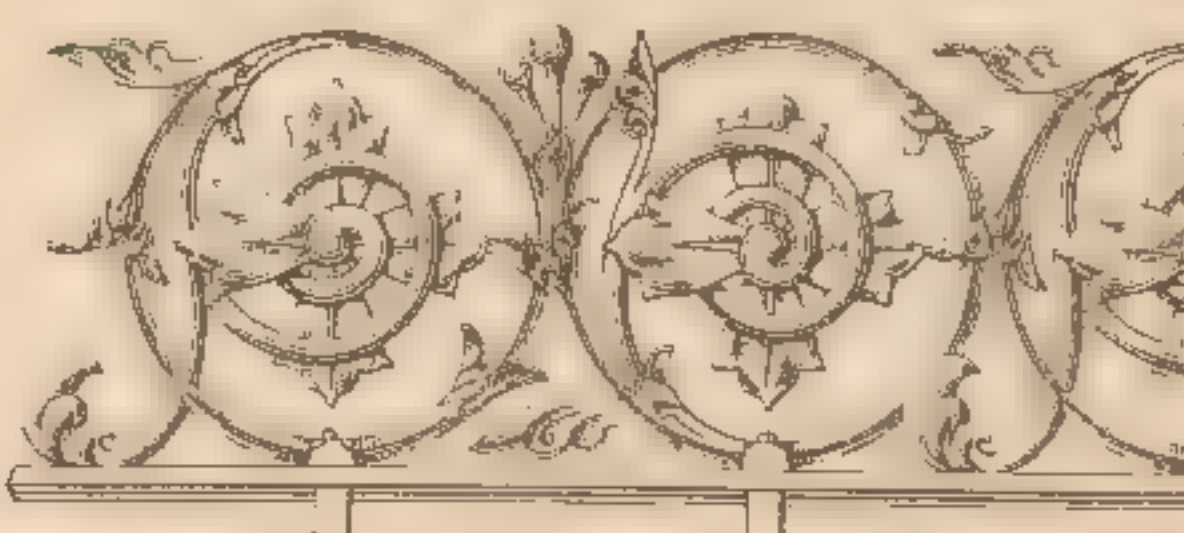
No 36



No 220



No 6



No 48



No 3

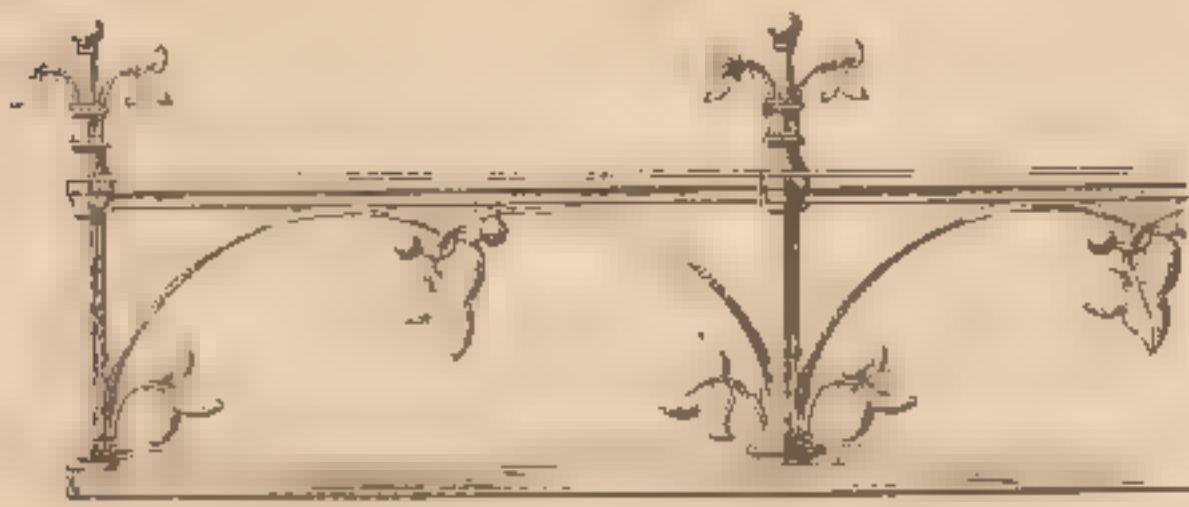


One face

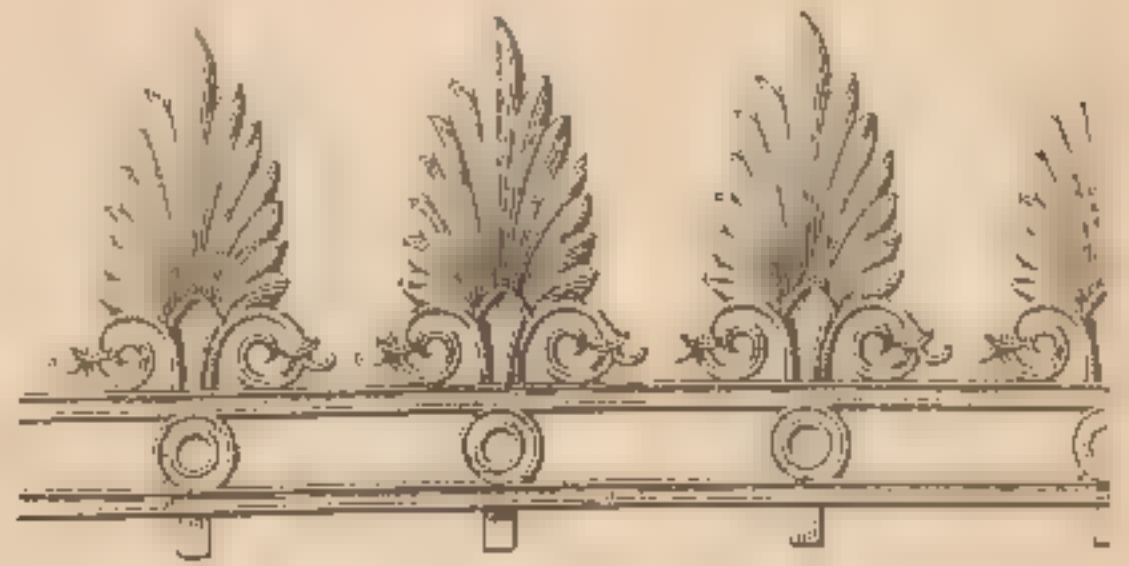
SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING & C

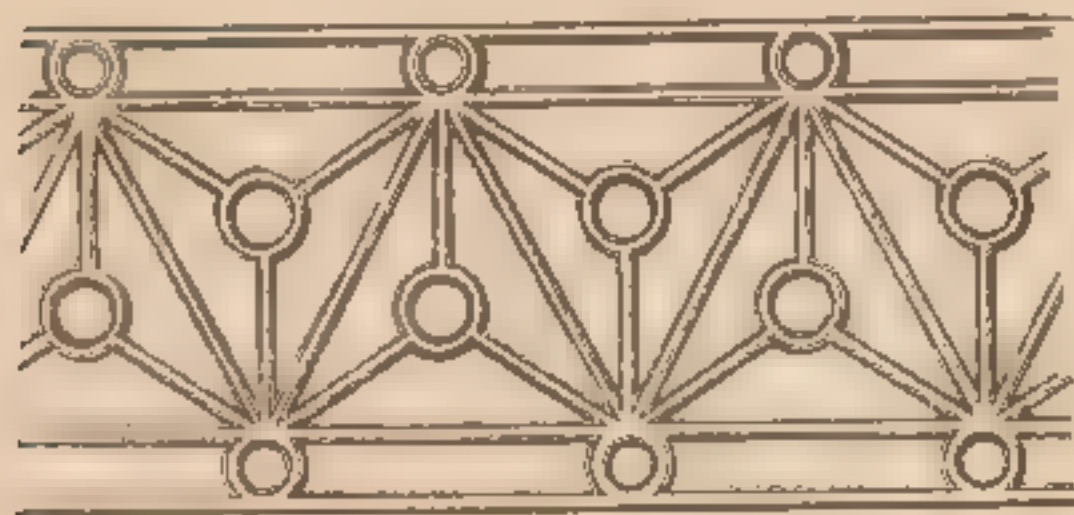
47



No. 349

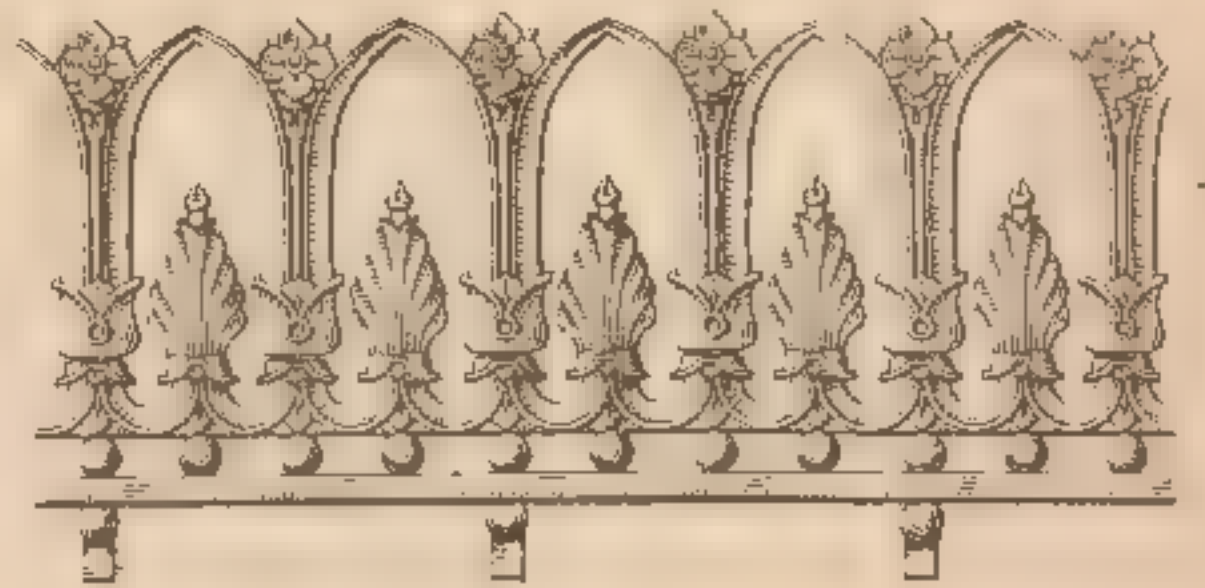


No. 478



One face

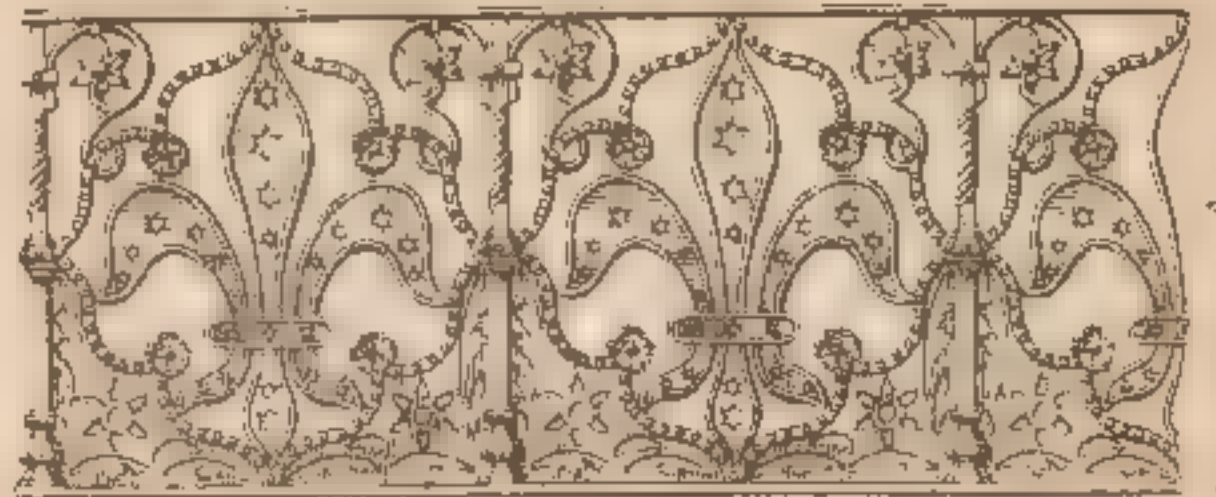
No. 273



No. 38

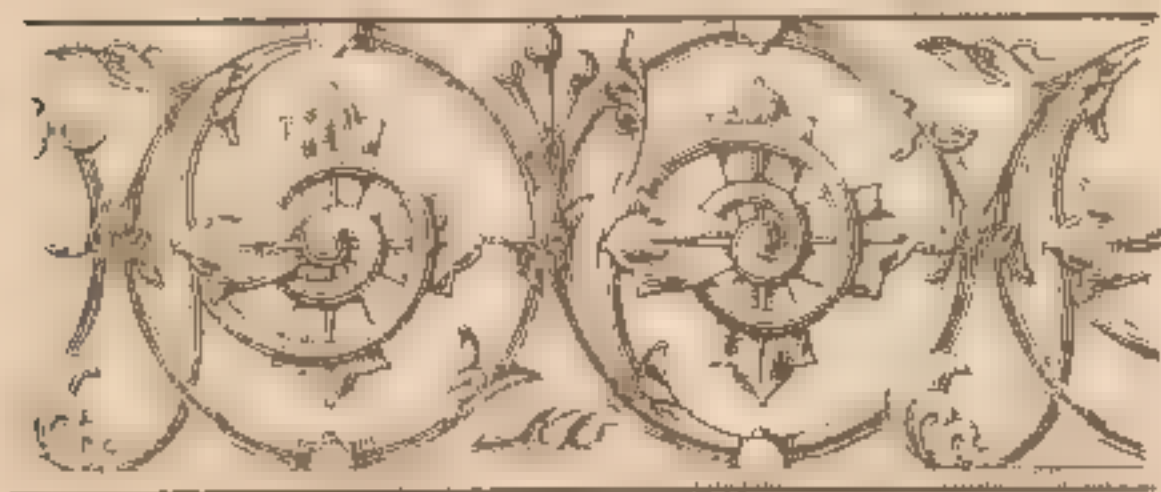


No. 4

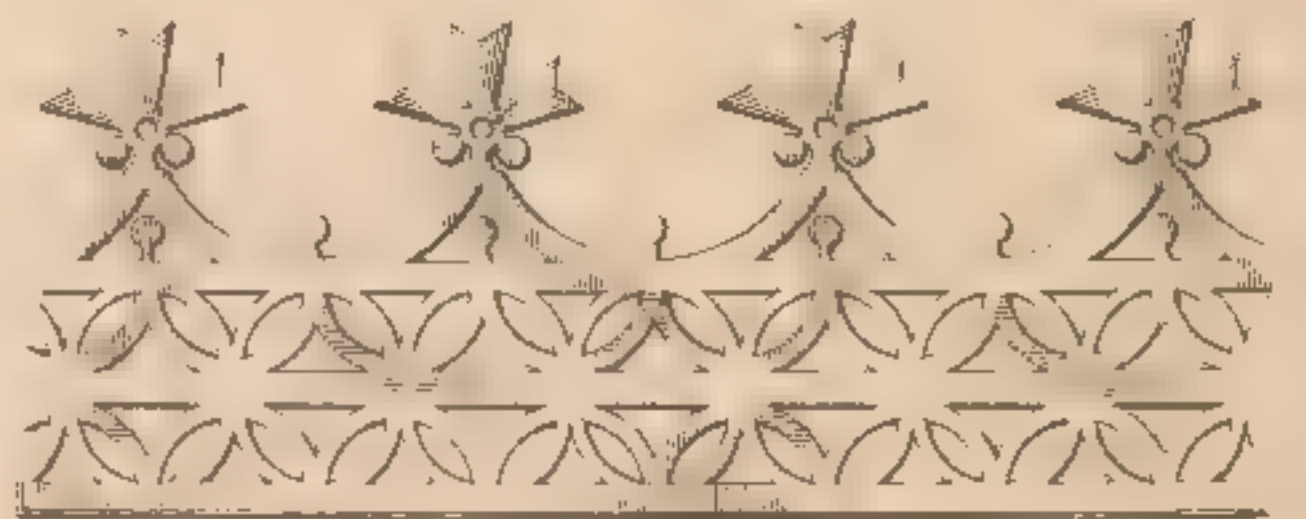


No. 3

Q
A
P
H
S



No. 35

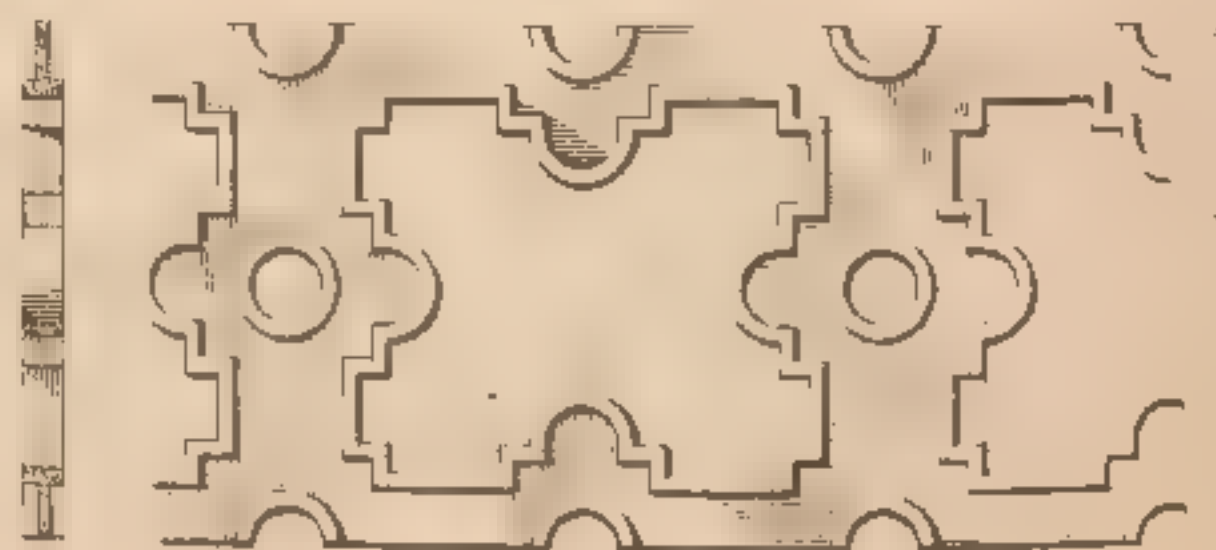


No. 274



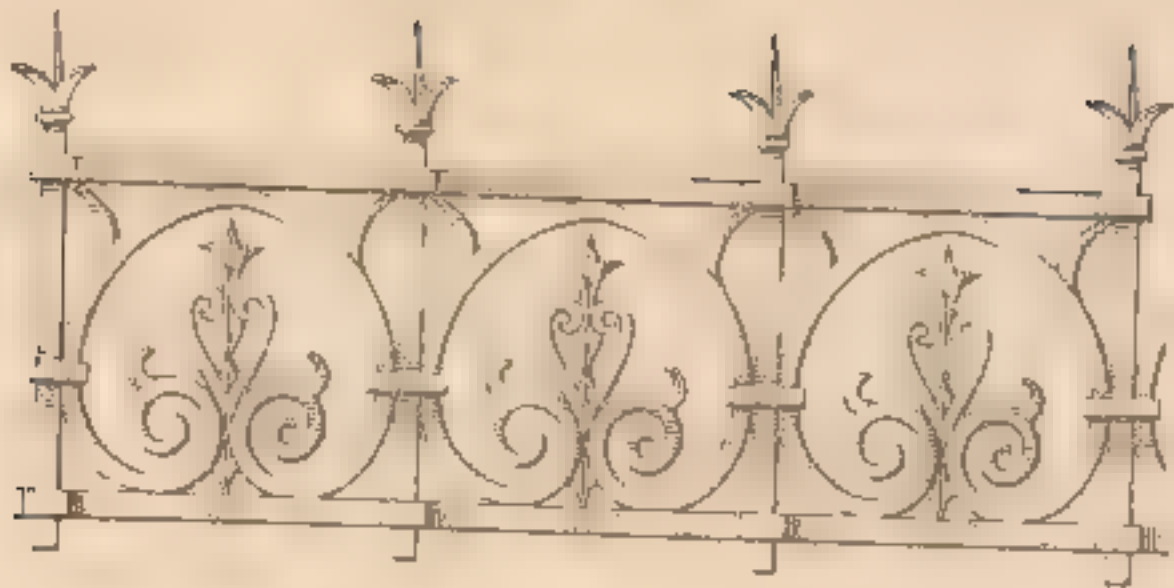
One face

No. 474



F T

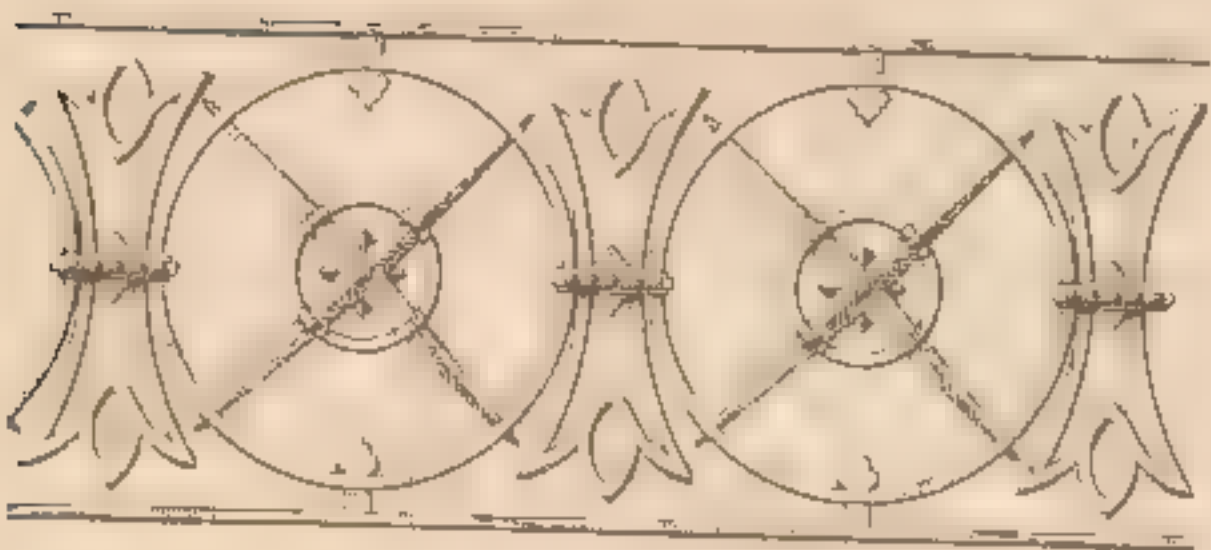
MACFARLANE'S RAILING &C



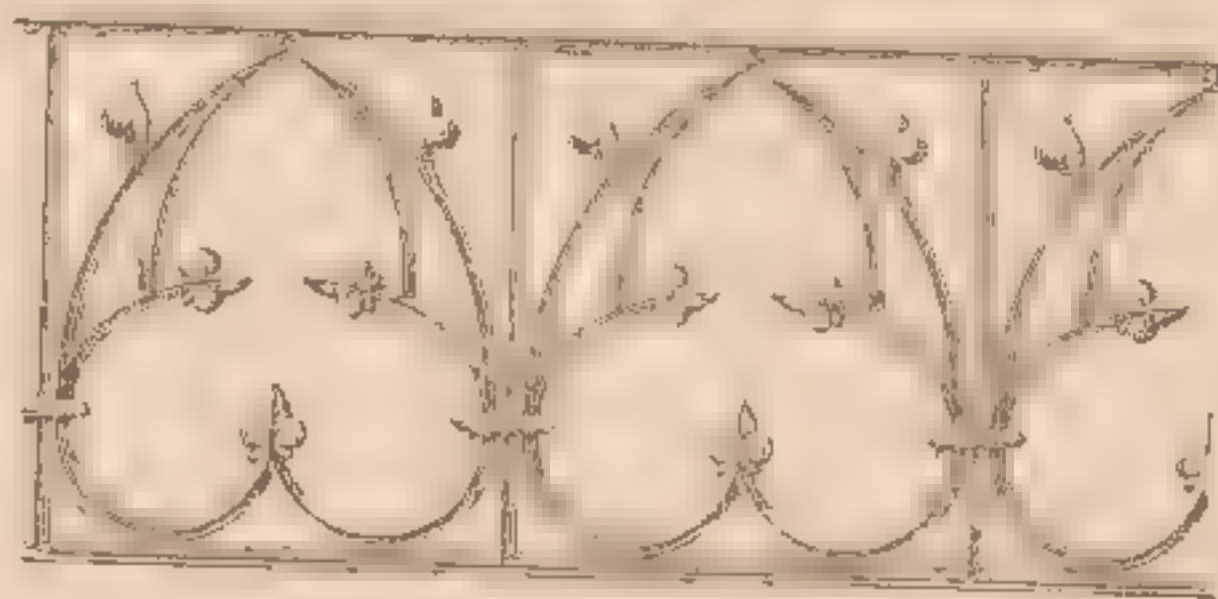
No. 1



No. 2



No. 3



No. 4



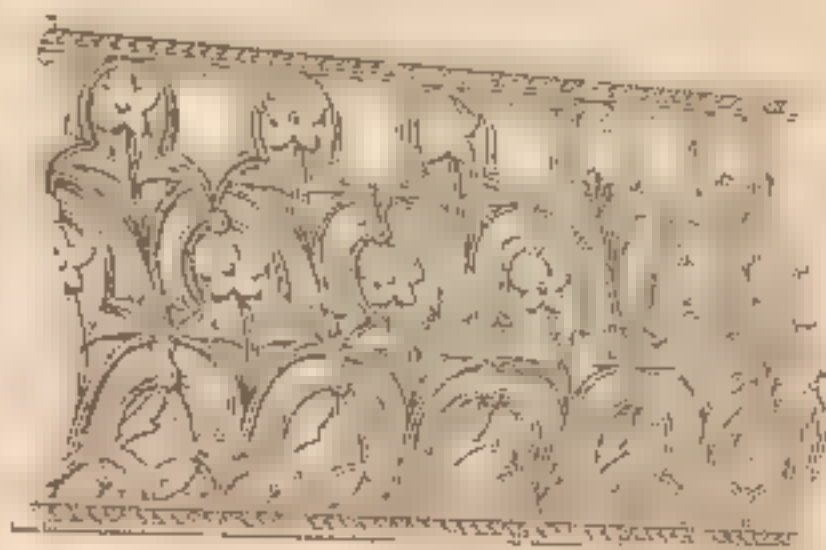
No. 5



No. 6



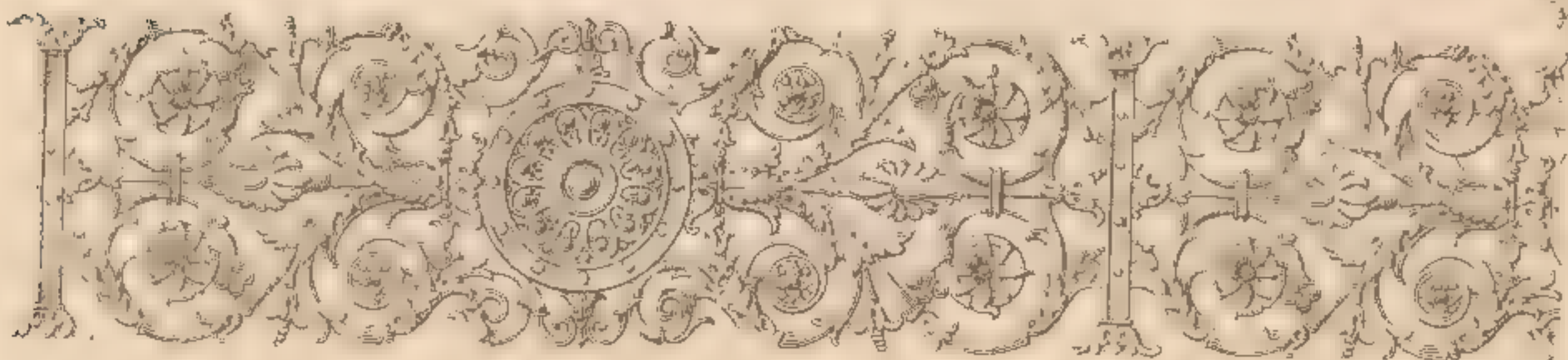
No. 7



No. 8

One face

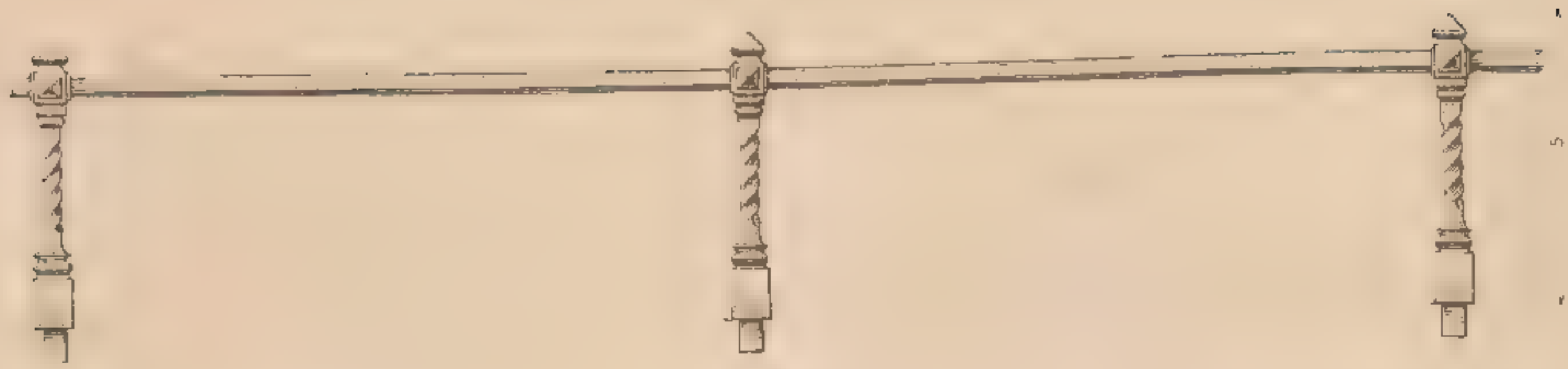
No. 9



SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING &c

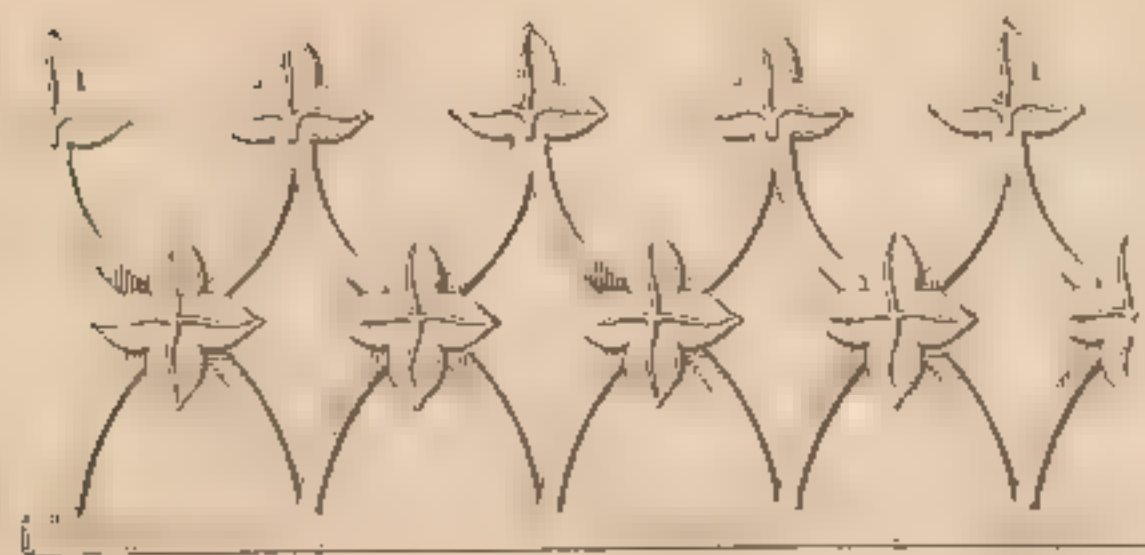
Nº 434



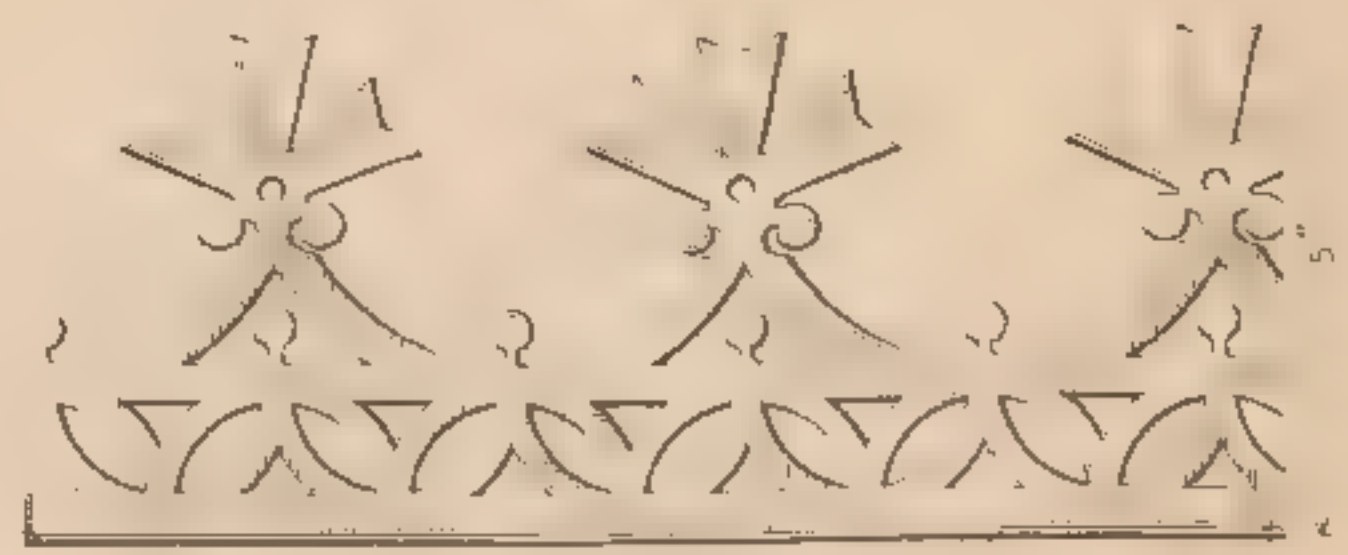
Nº 50



Nº 65



Nº 35



Nº 20



Ally
3

Nº 28

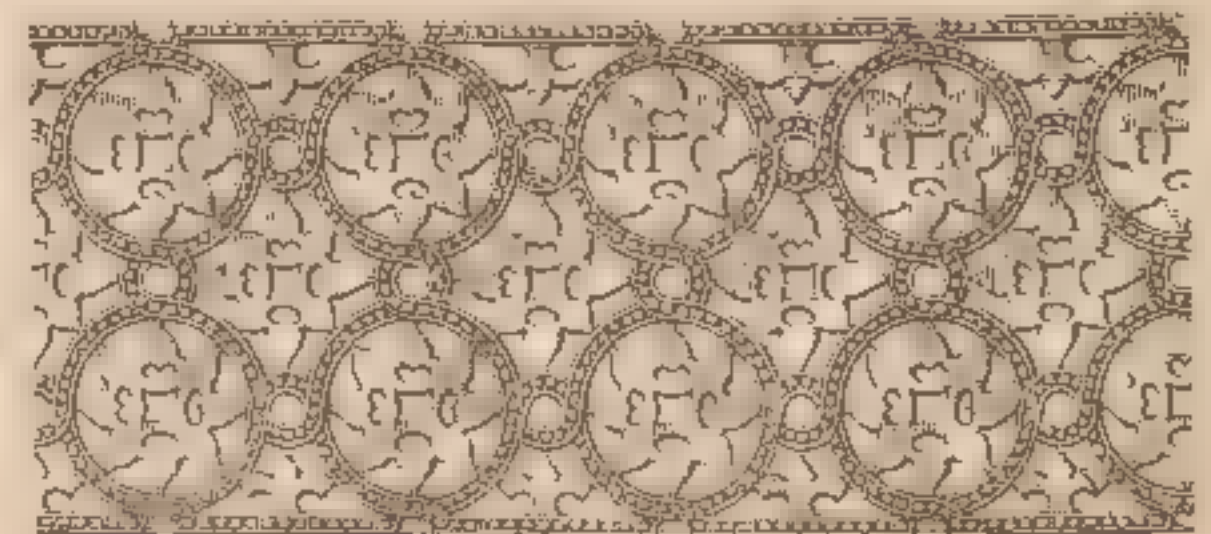


Nº 2



Nº 438

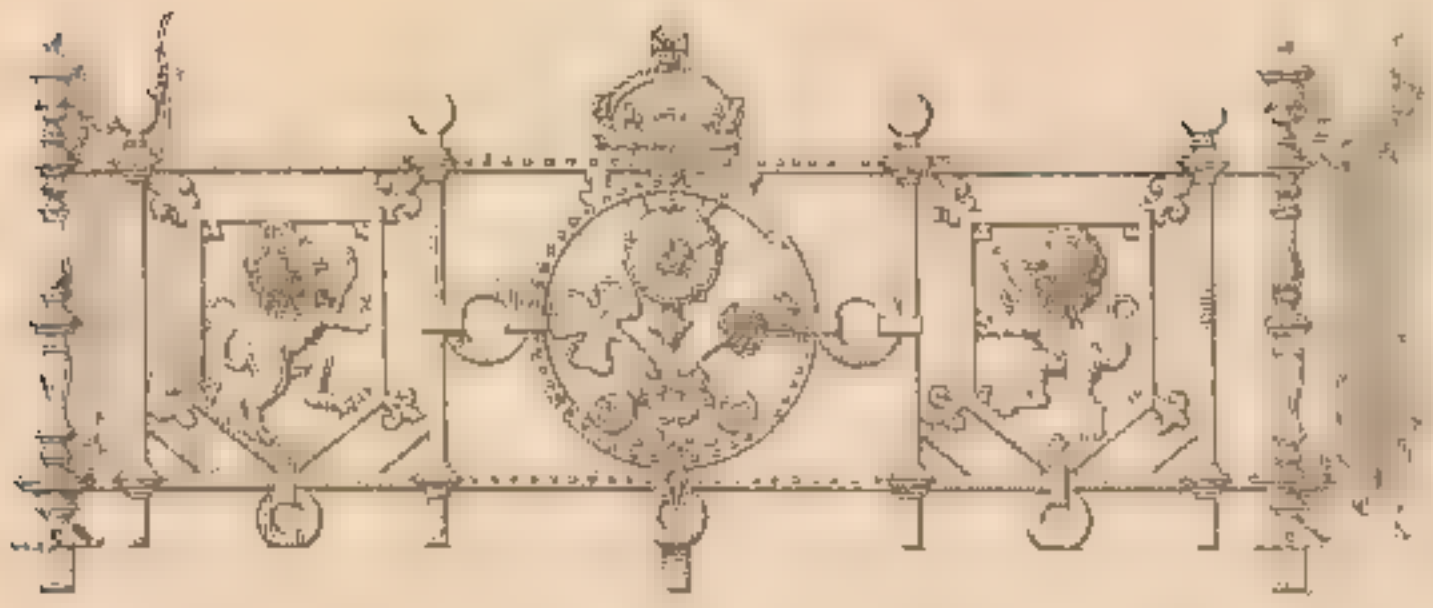
Ally
3



Ons face

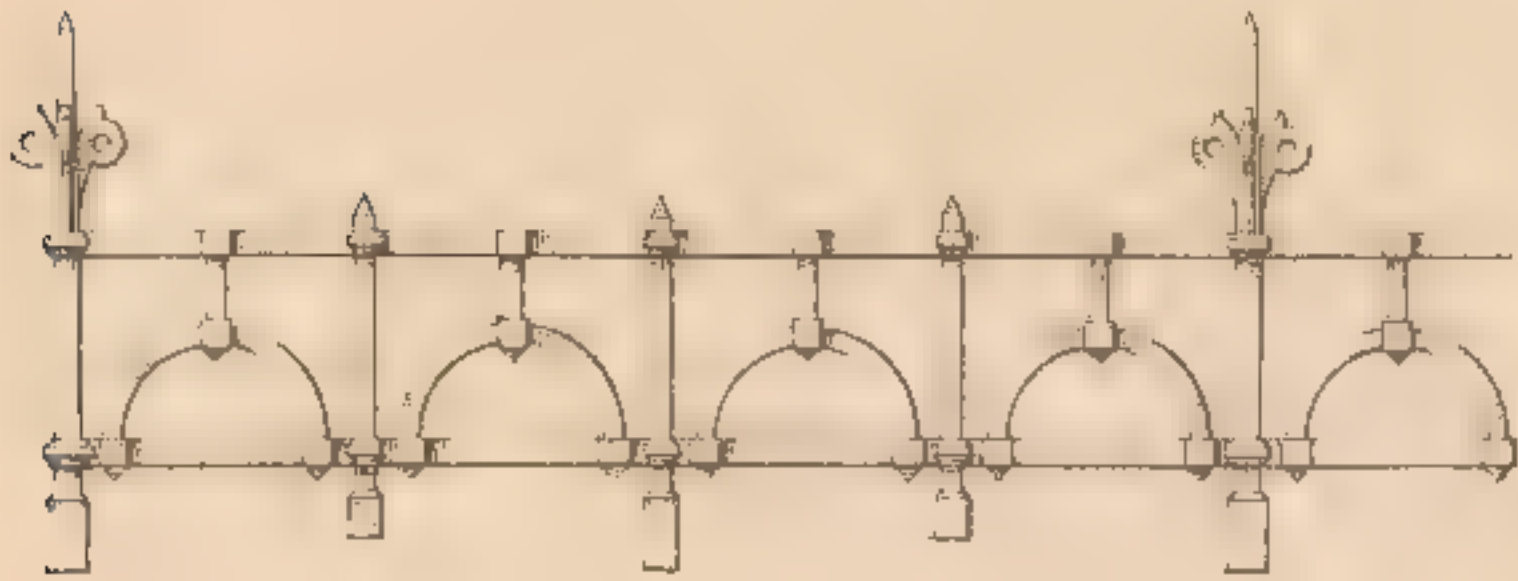
MACFARLANE'S RAILING & CO

Nº 117



One face

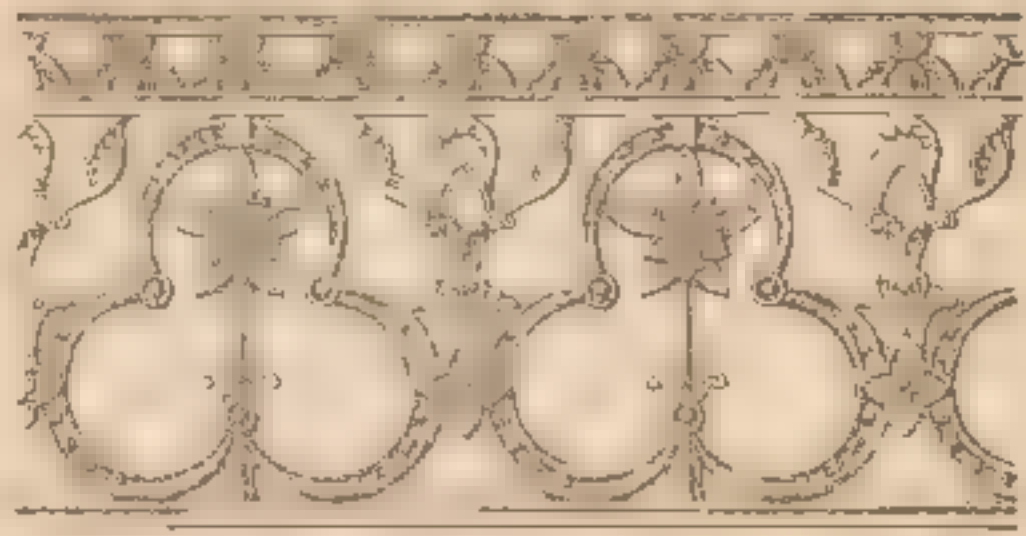
Nº 276



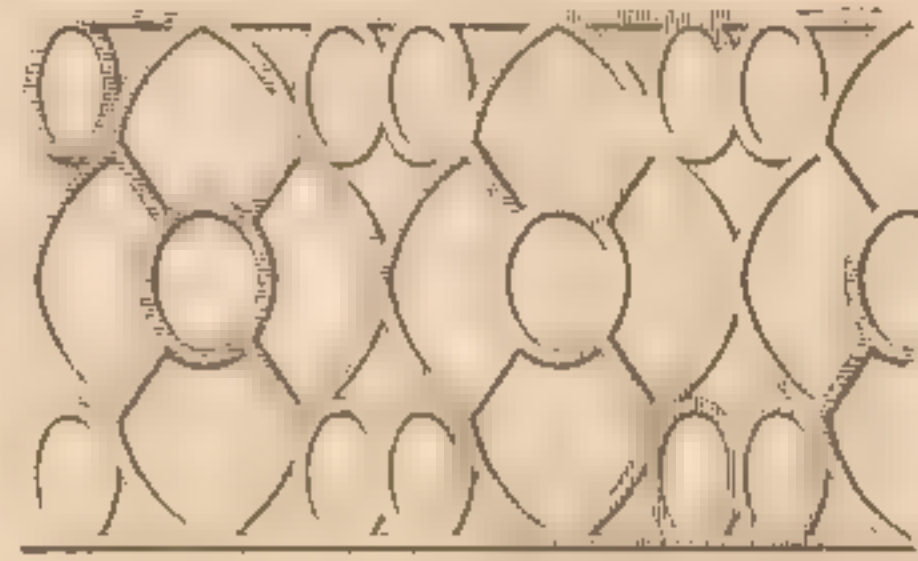
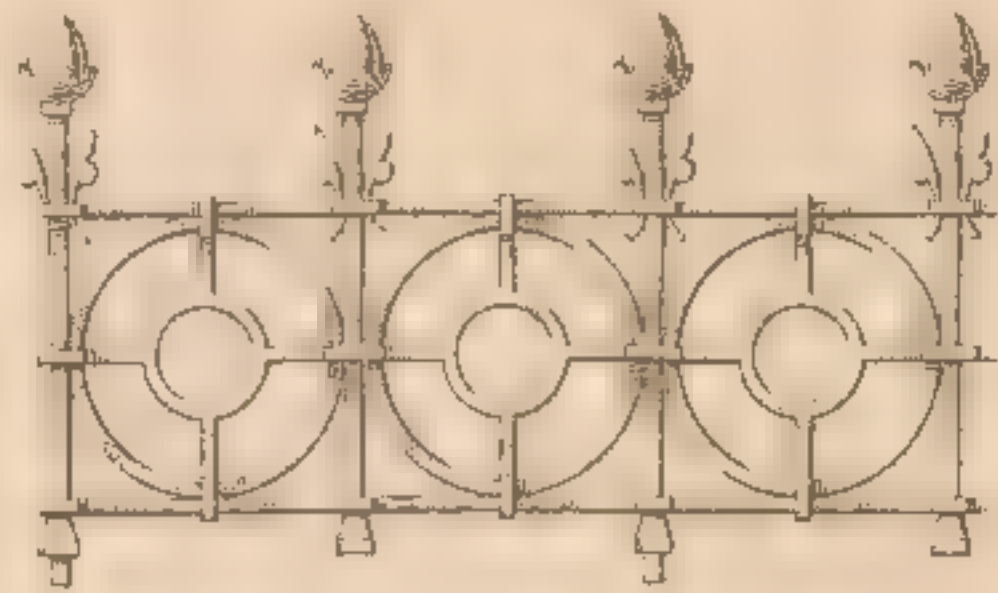
Nº 145



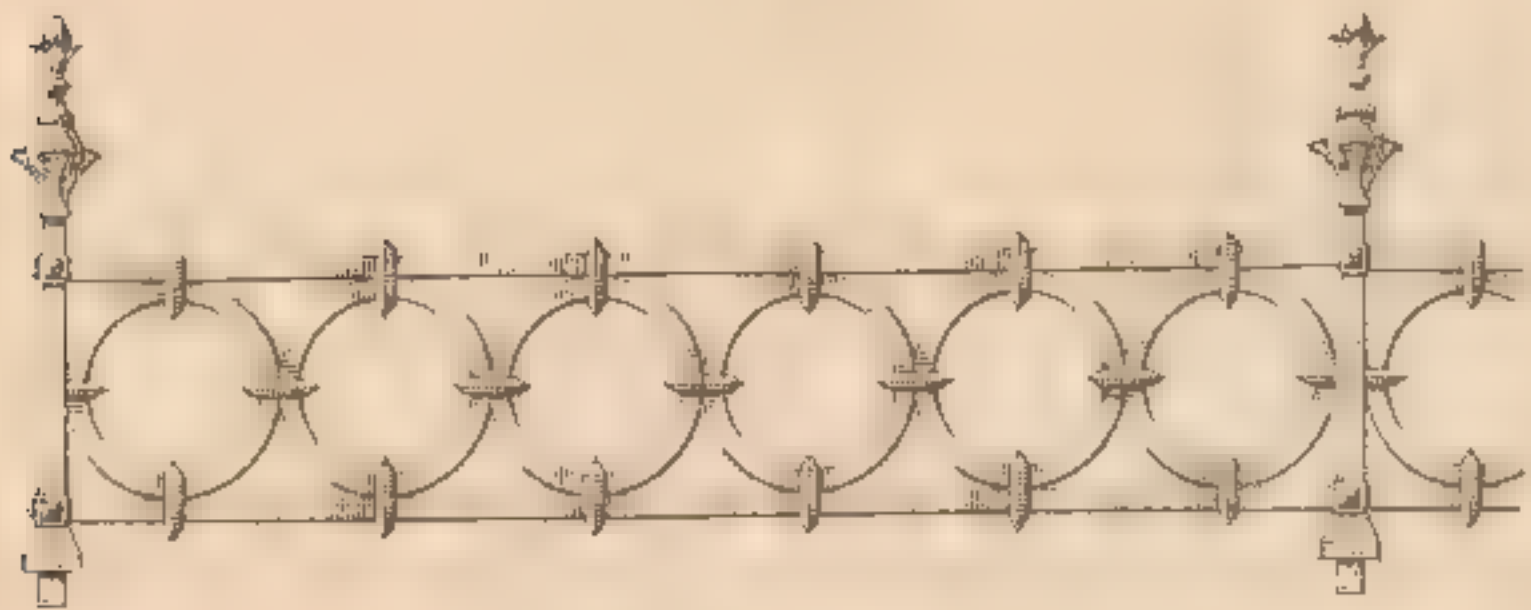
Nº 140



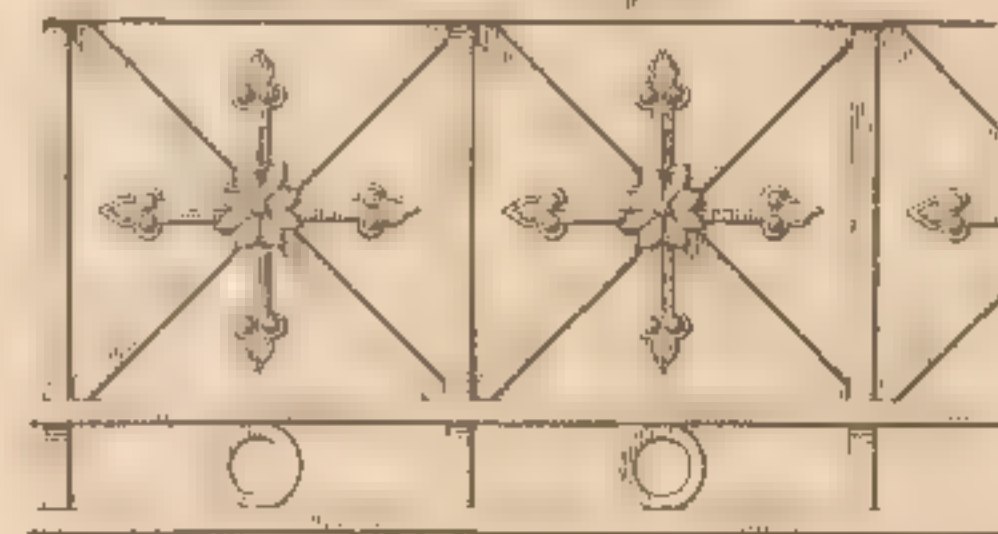
Nº 140



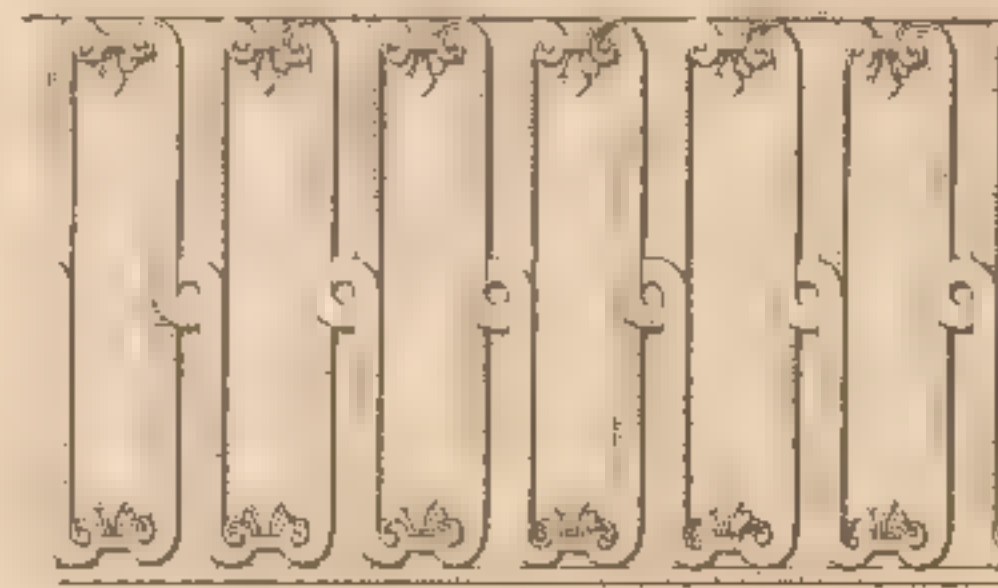
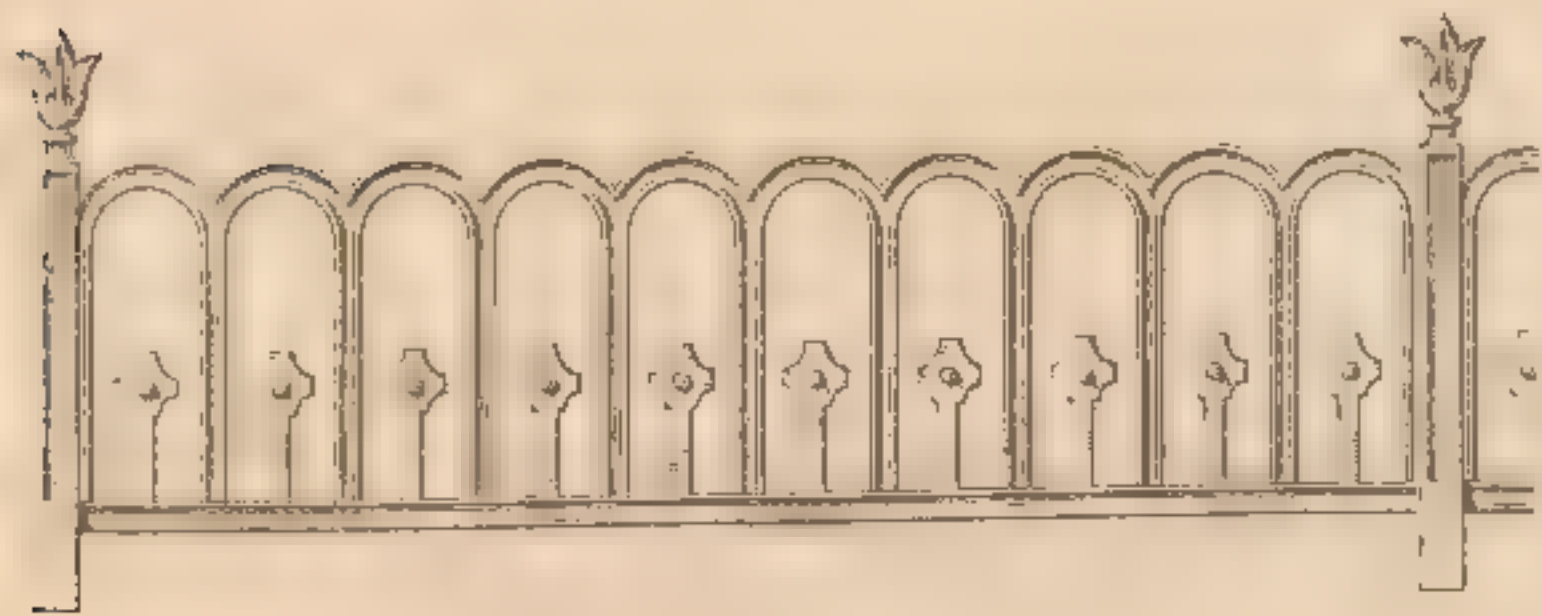
Nº 24



Nº 27



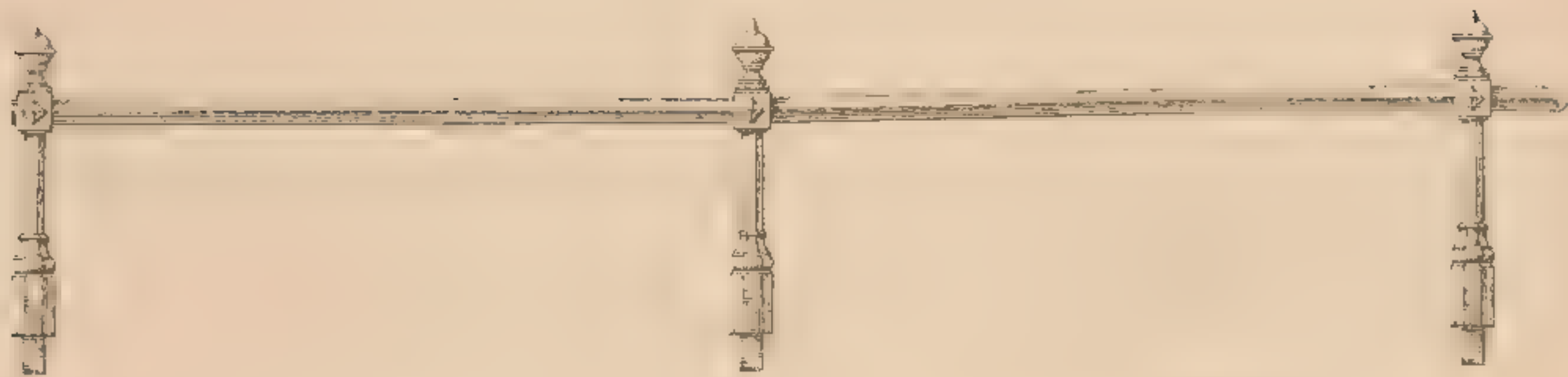
Nº 100



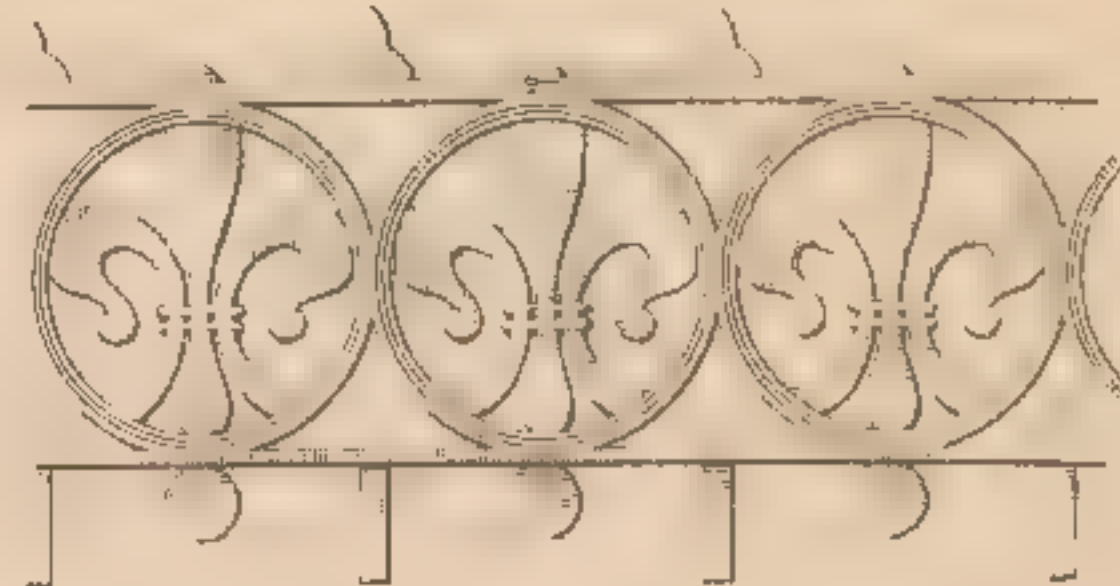
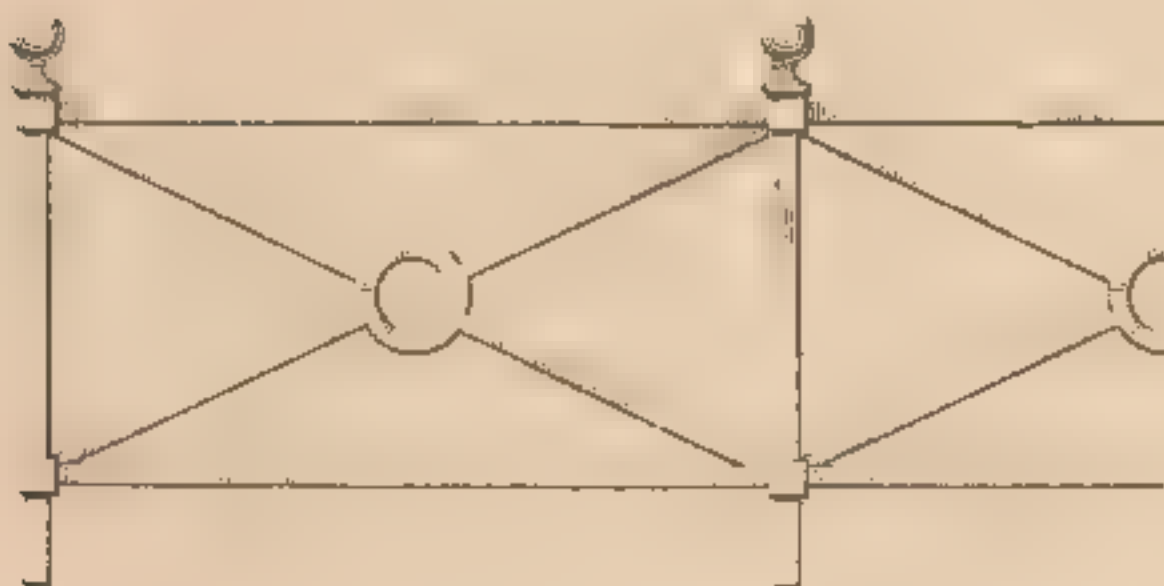
SCALE INCH = FOOT

MACFARLANE'S RAILING & CO

Nº 188

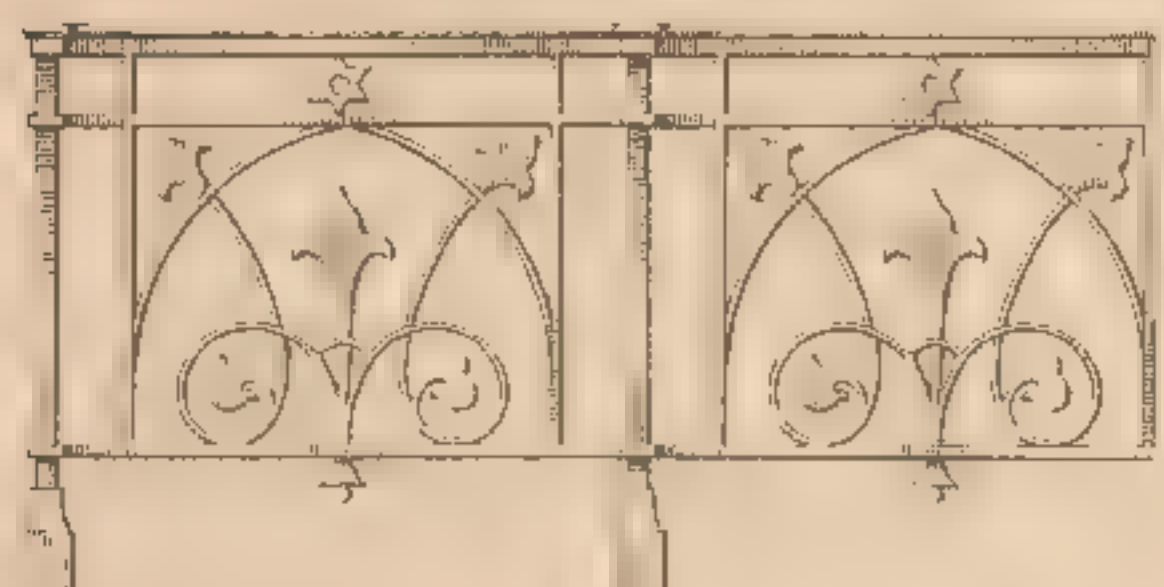


Nº 419



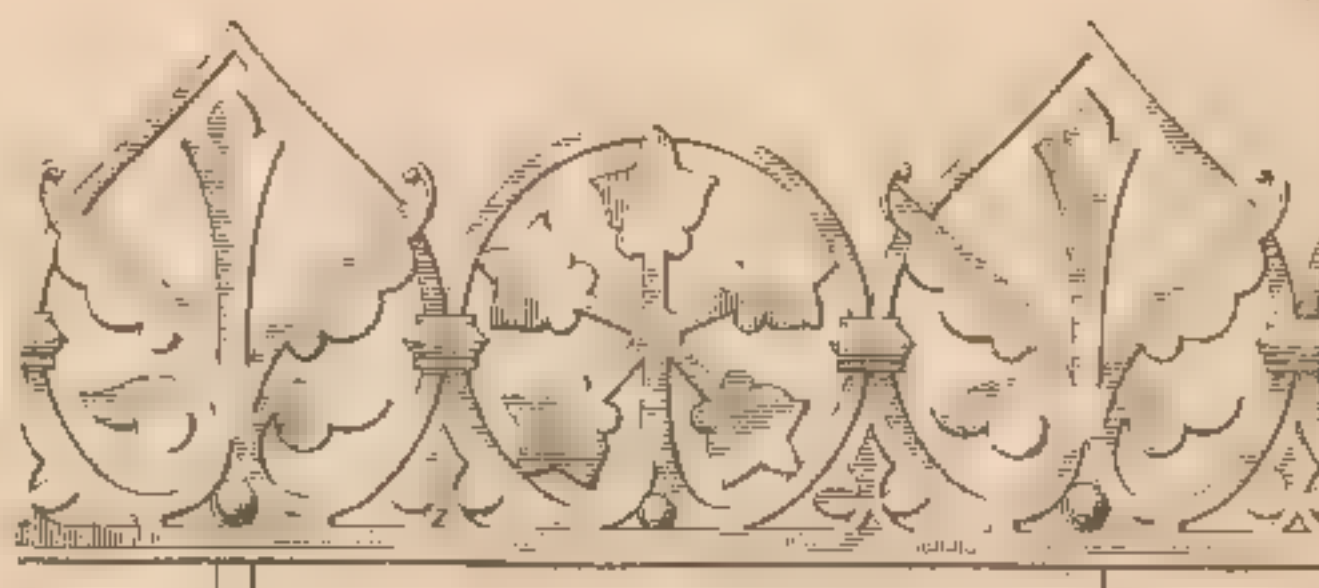
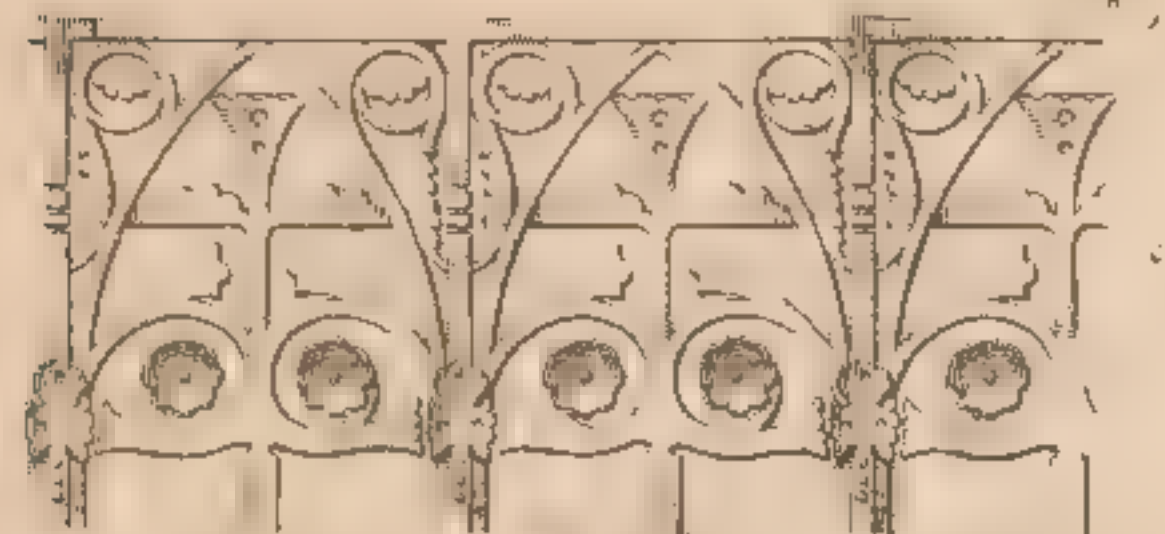
Nº 42

Nº 440



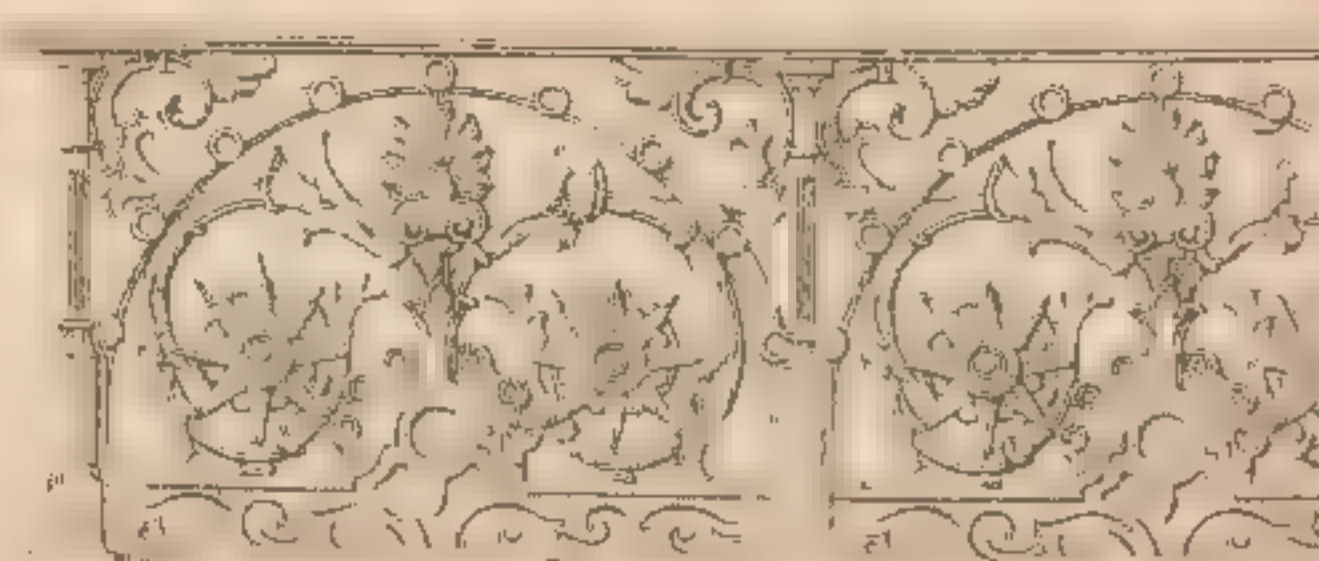
Nº 43

Nº 70



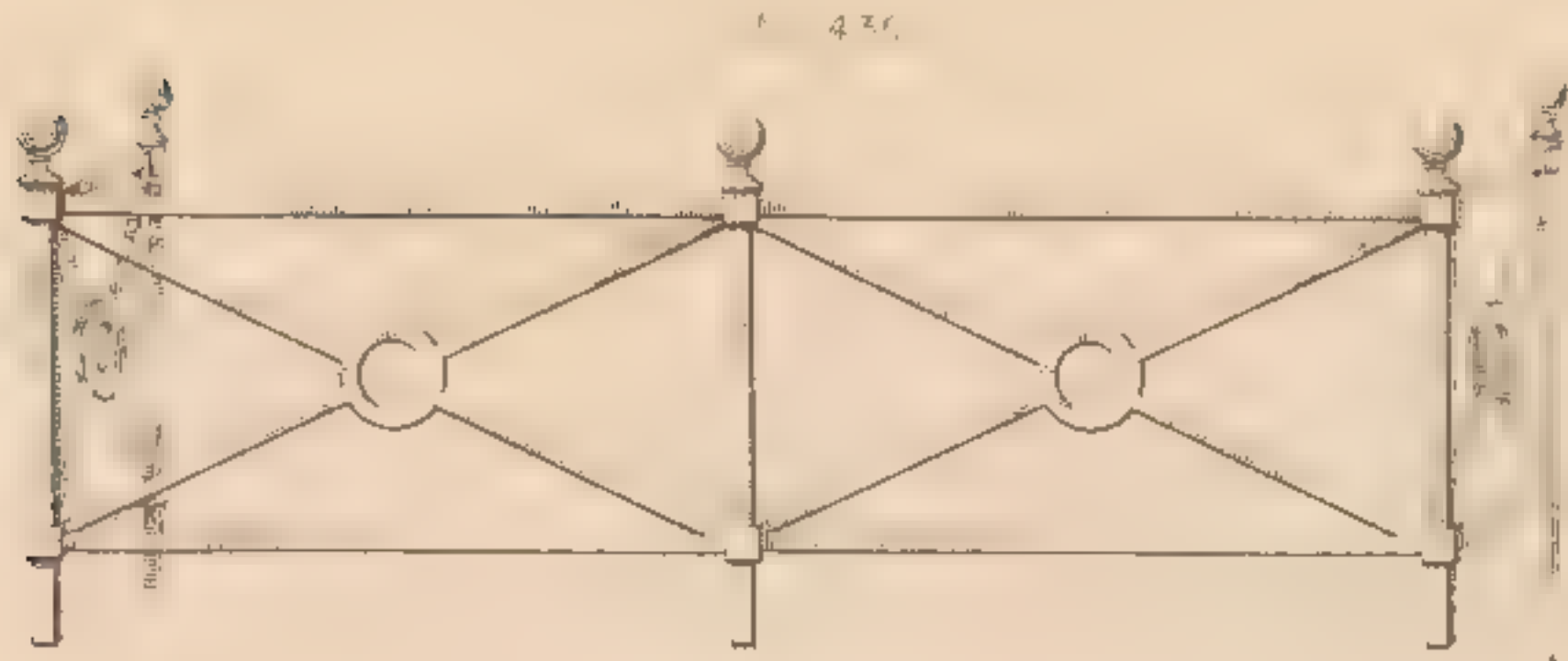
Nº 57

Nº 68

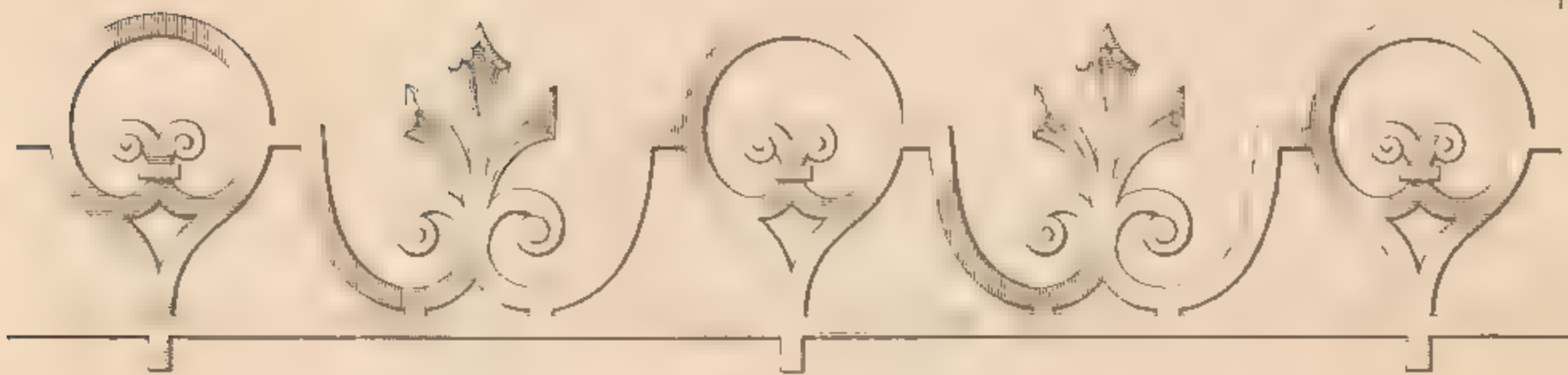


SCALE IN FEET

MACFARLANE'S RAILING & CO



4 252



4 253



4 254 between centres



4 255 between centres

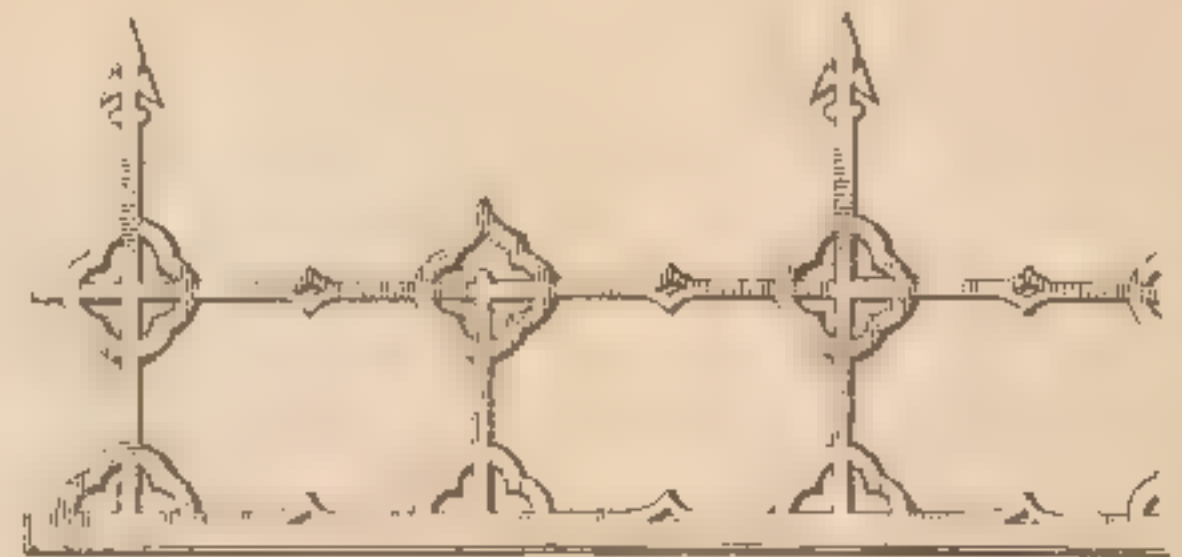


4 256

Nº 34

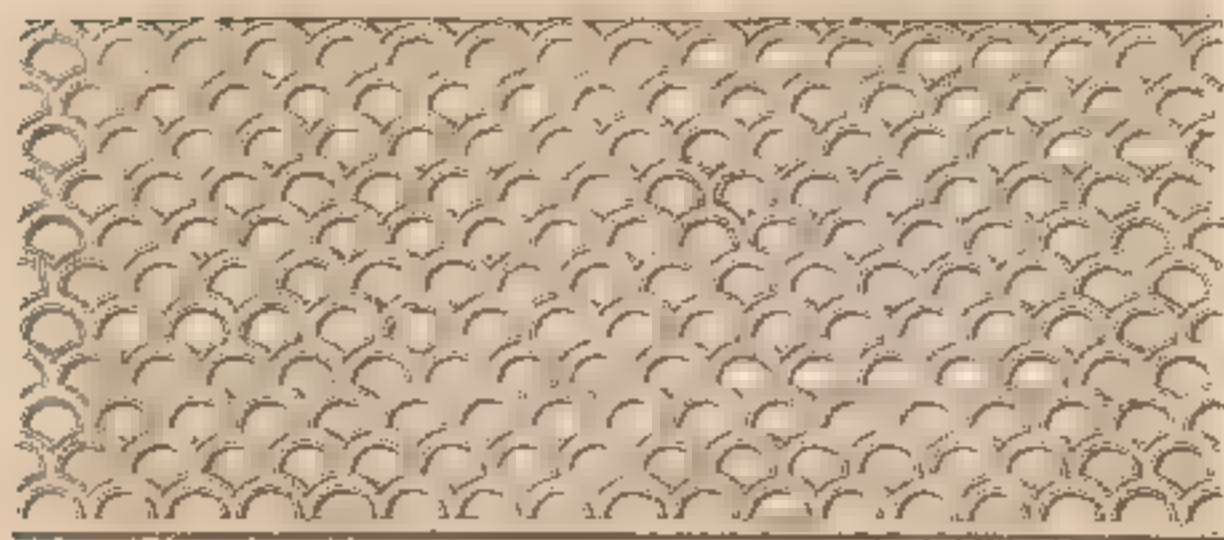


Nº 3



Nº 2

APR 3



Nº 56



Nº 19

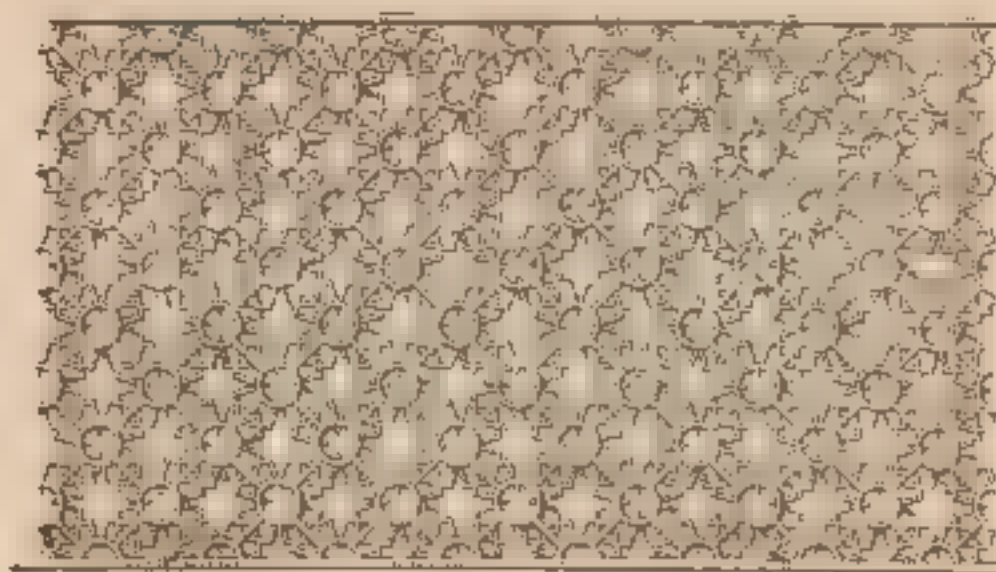
APR 3



Nº 389



Nº 03



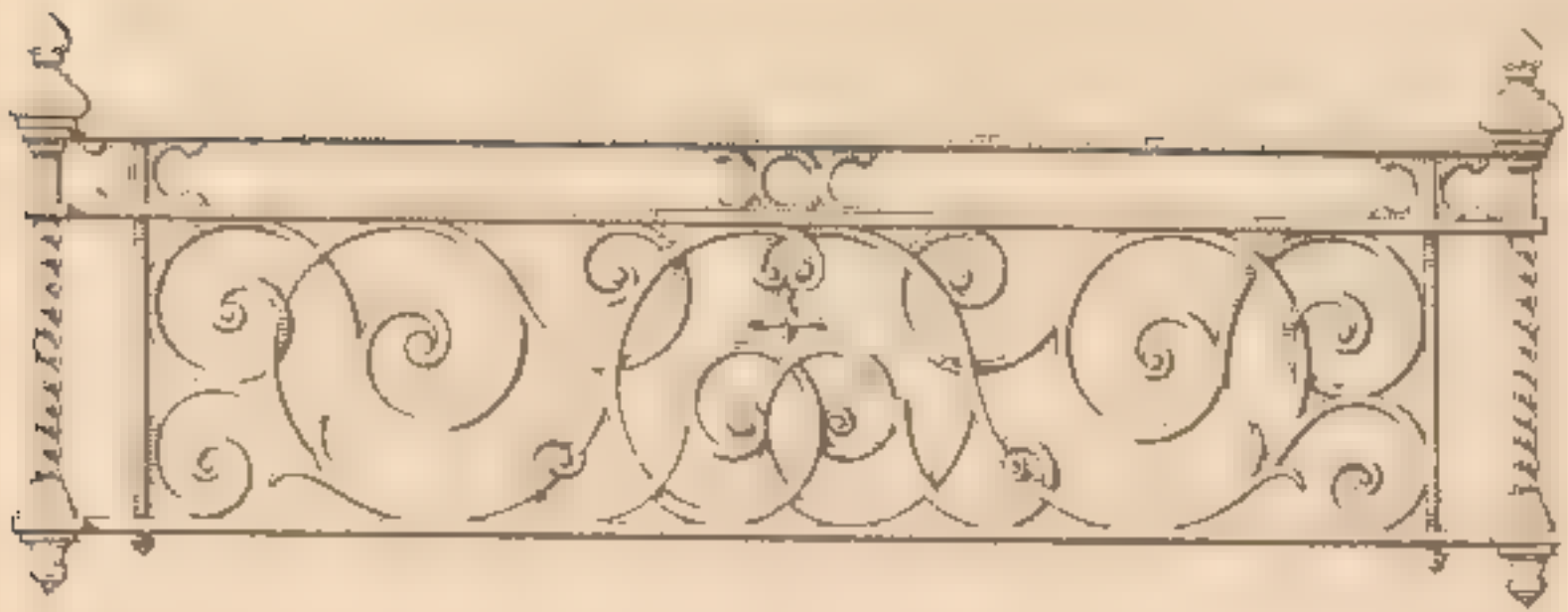
One face

Nº 290

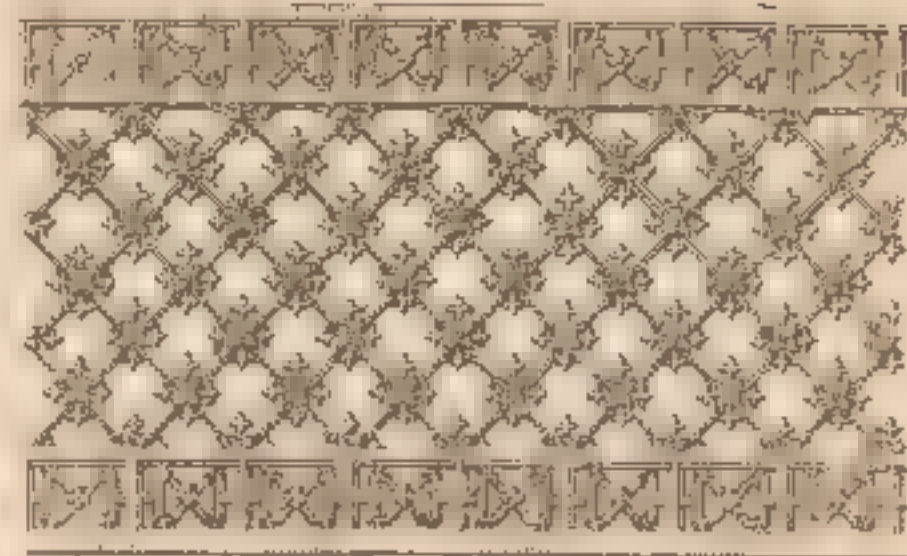


MACFARLANE'S RAILING &c

Nº 282

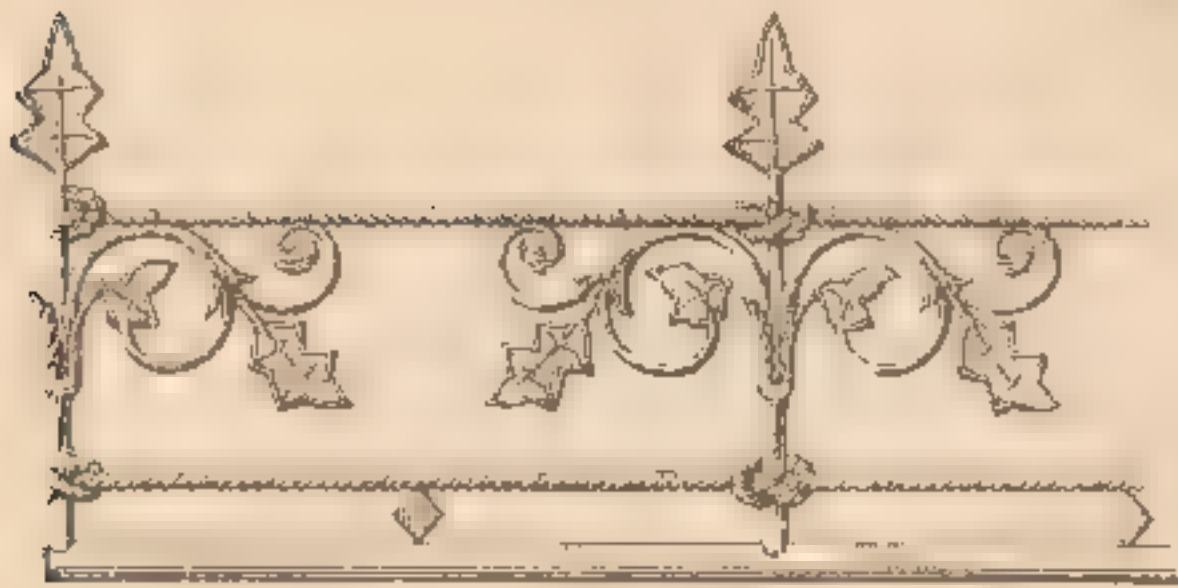


Nº 02

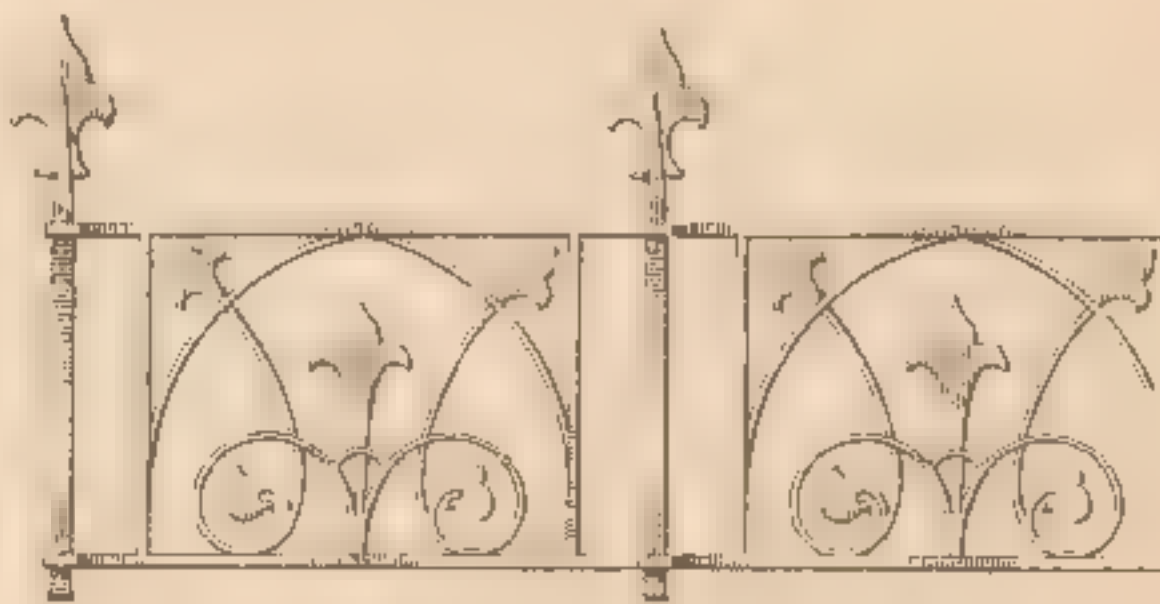


One face

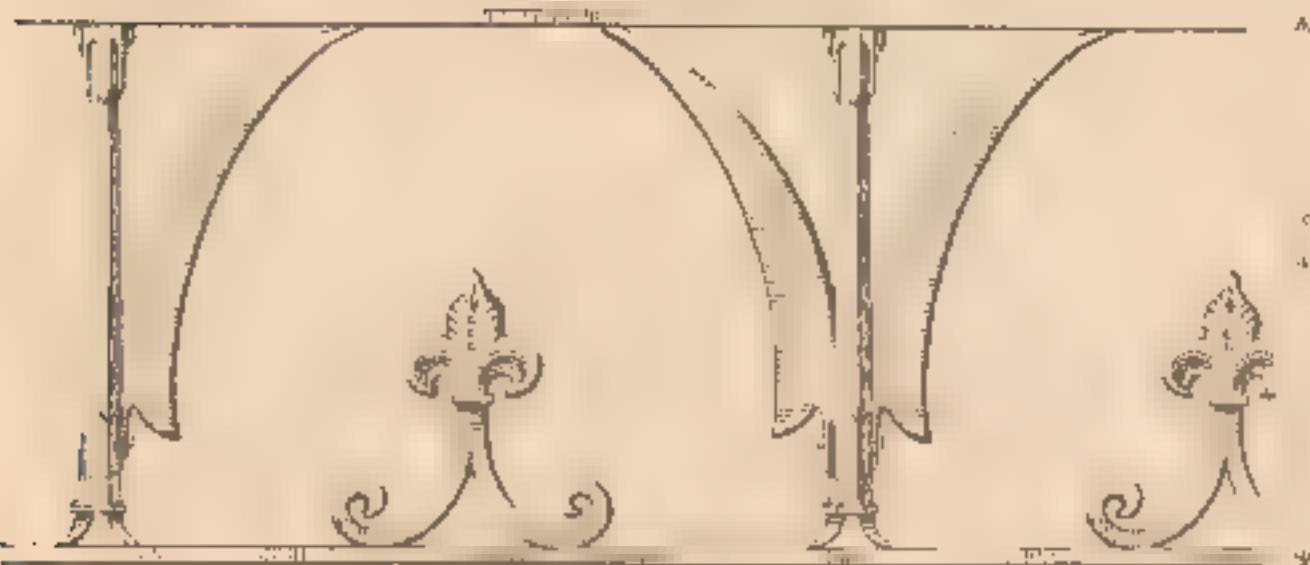
Nº 54



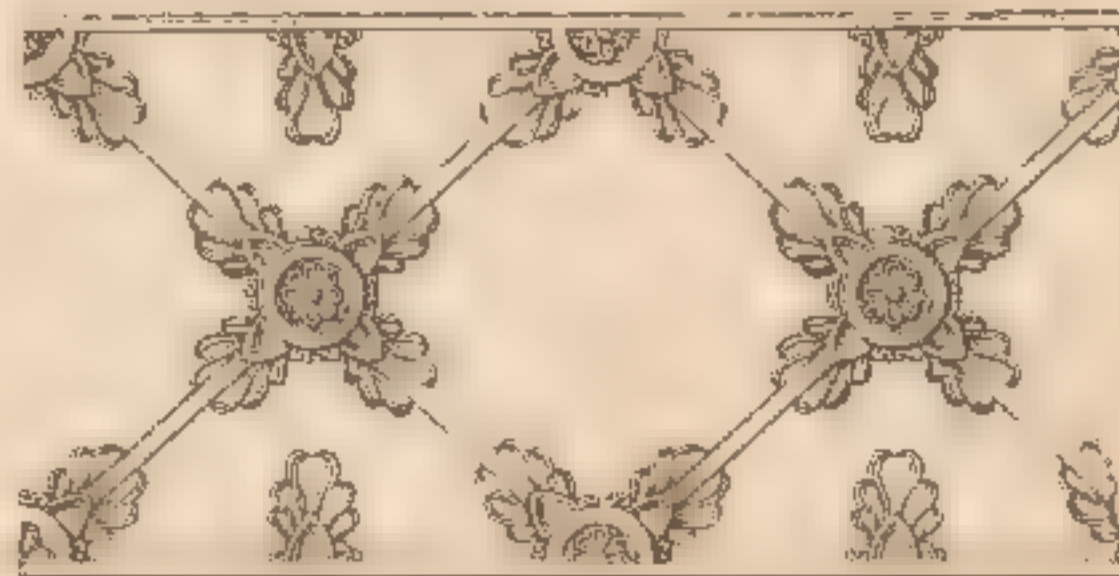
9-



Nº 135



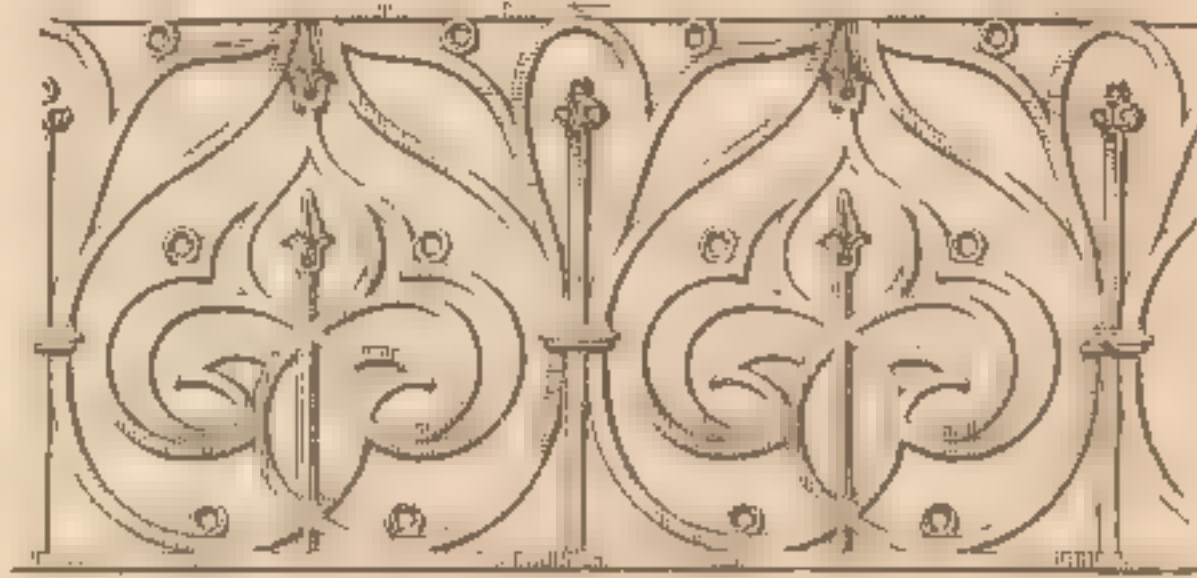
Nº 10



Nº 436



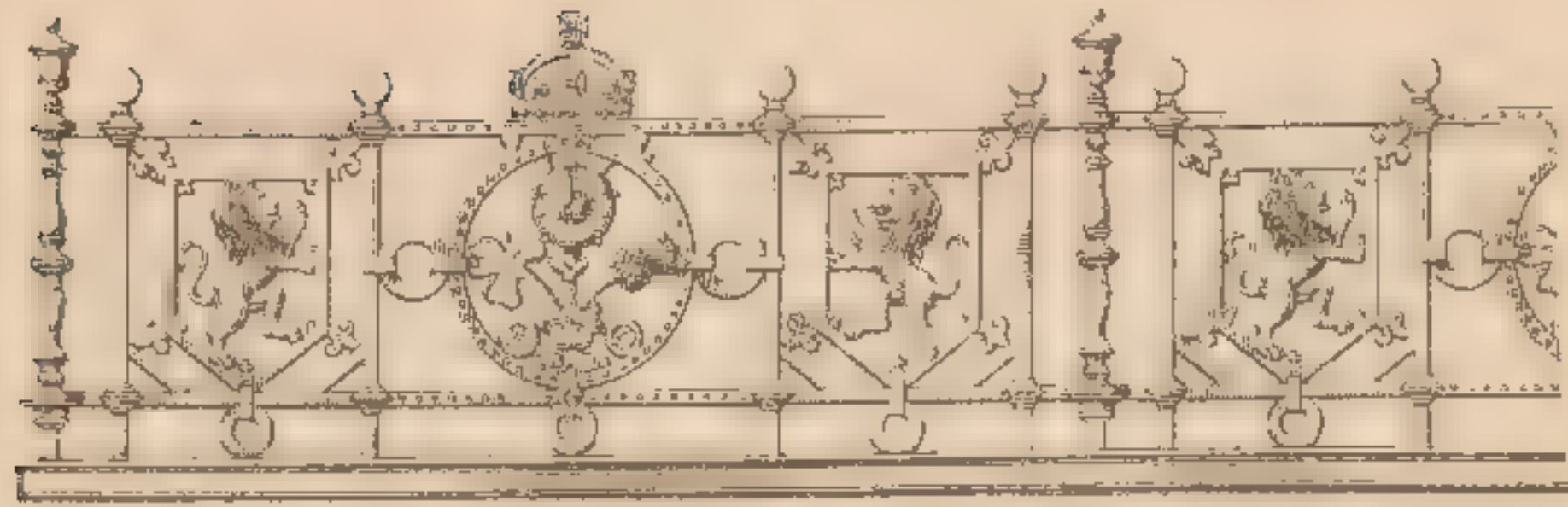
Nº 406



SCALE 1 INCH — FOOT

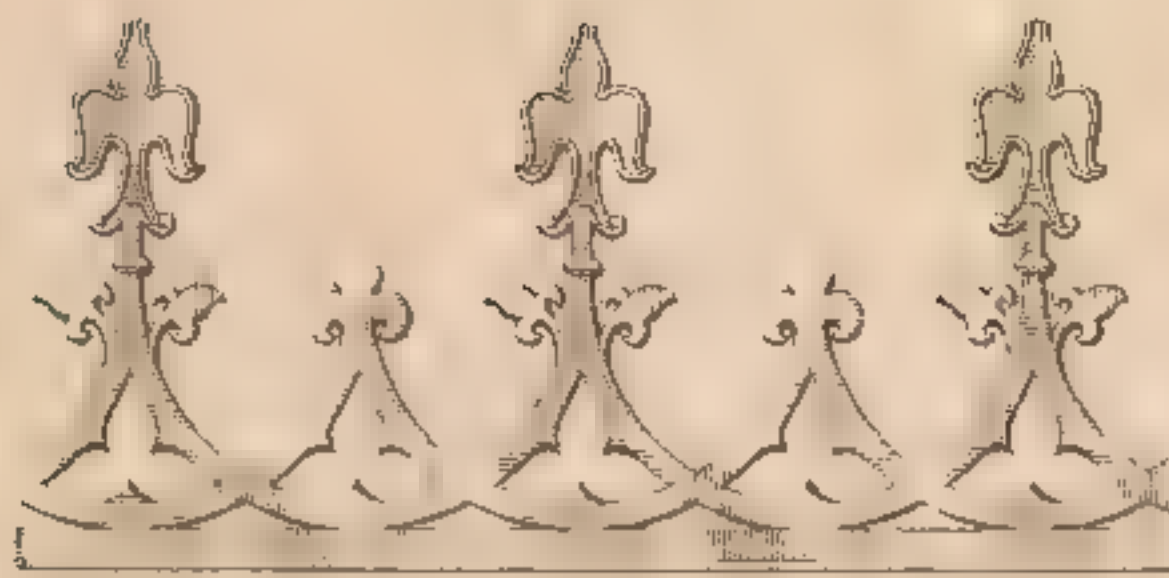
MACFARLANE'S RAILING & CO

Nº 124

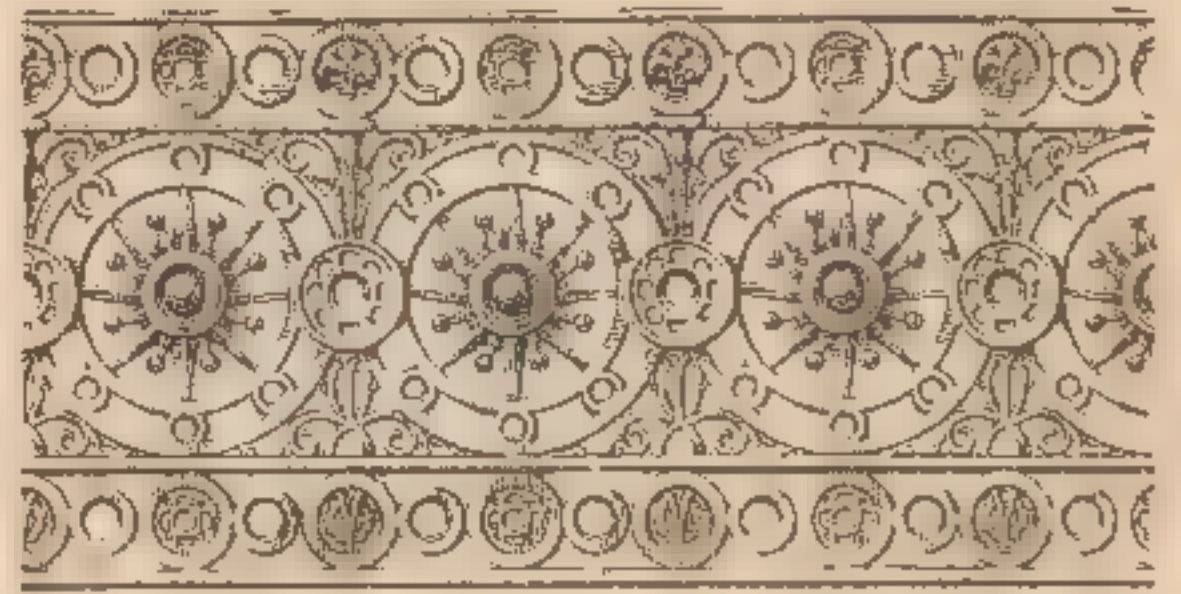


Or. f. c.

Nº 47



Nº 83



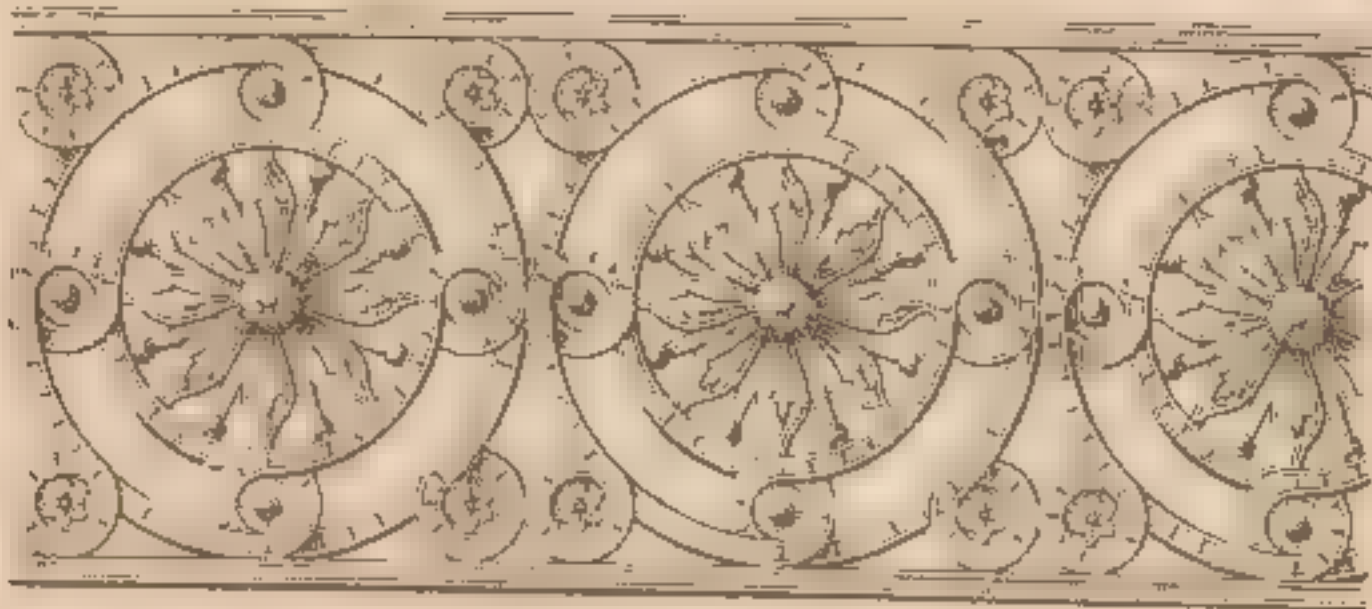
Nº 241



Nº 1

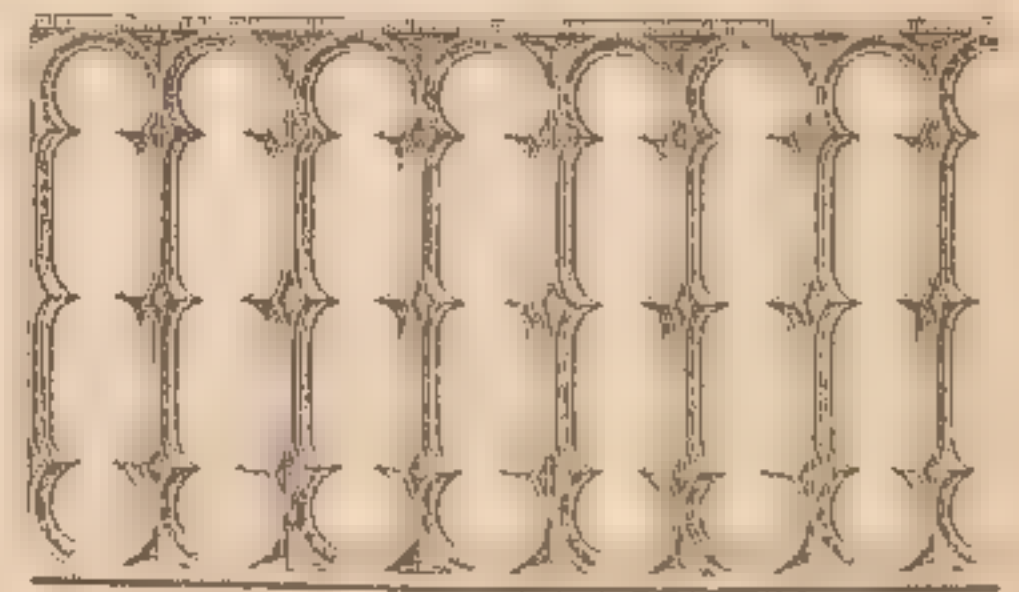


Nº 53



Nº 10

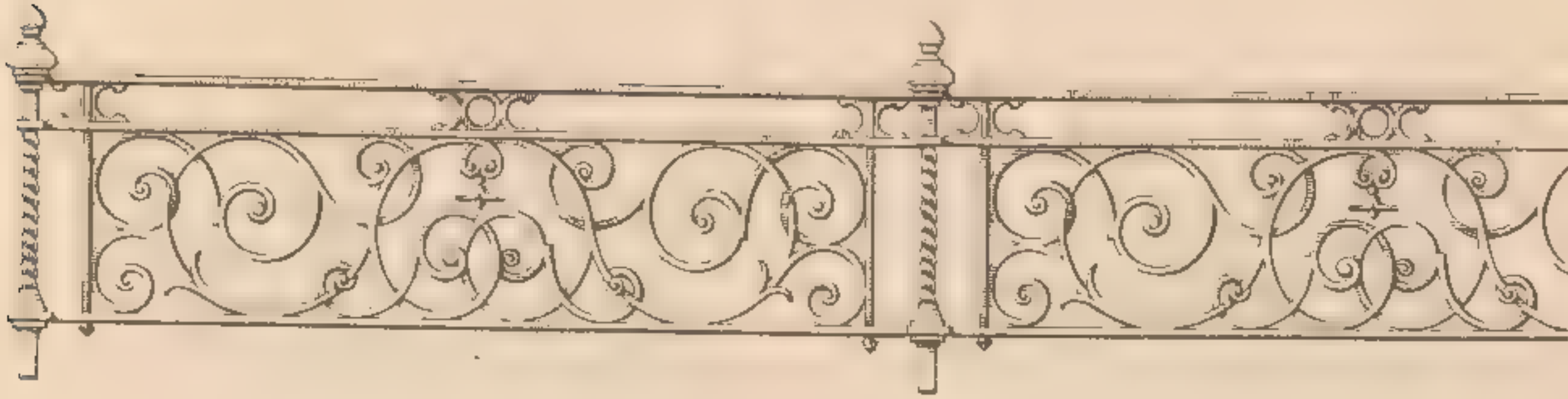
Nº 8



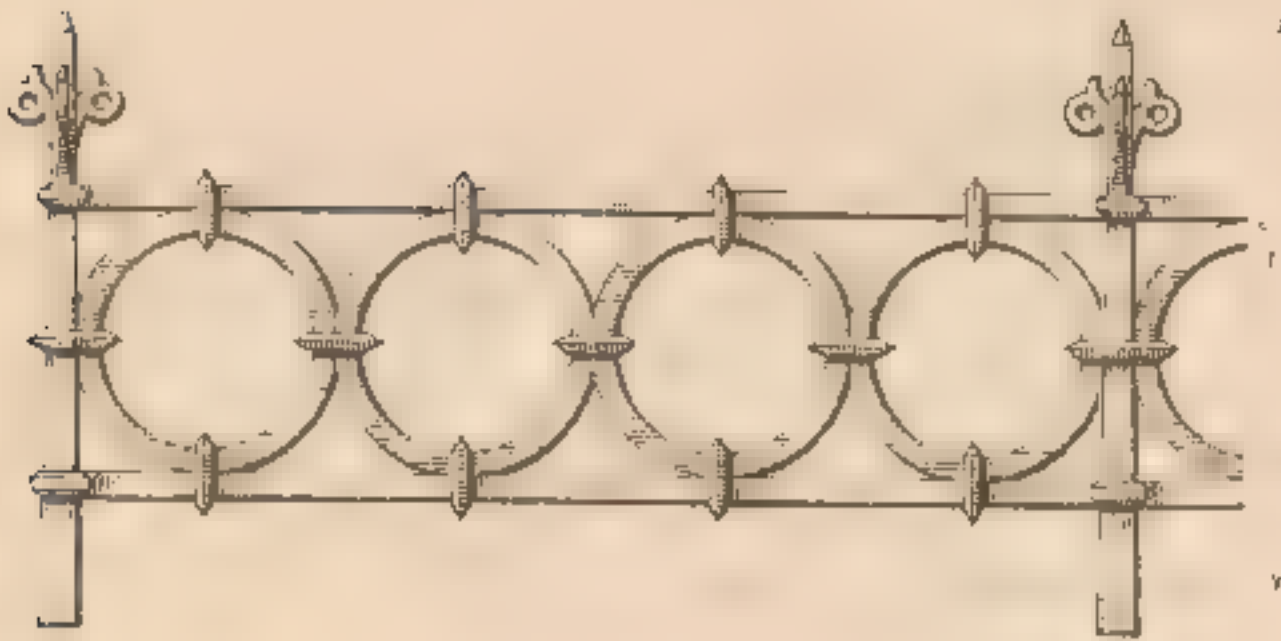
SCALE INCH — FOOT

MACFARLANE'S RAILING & CO

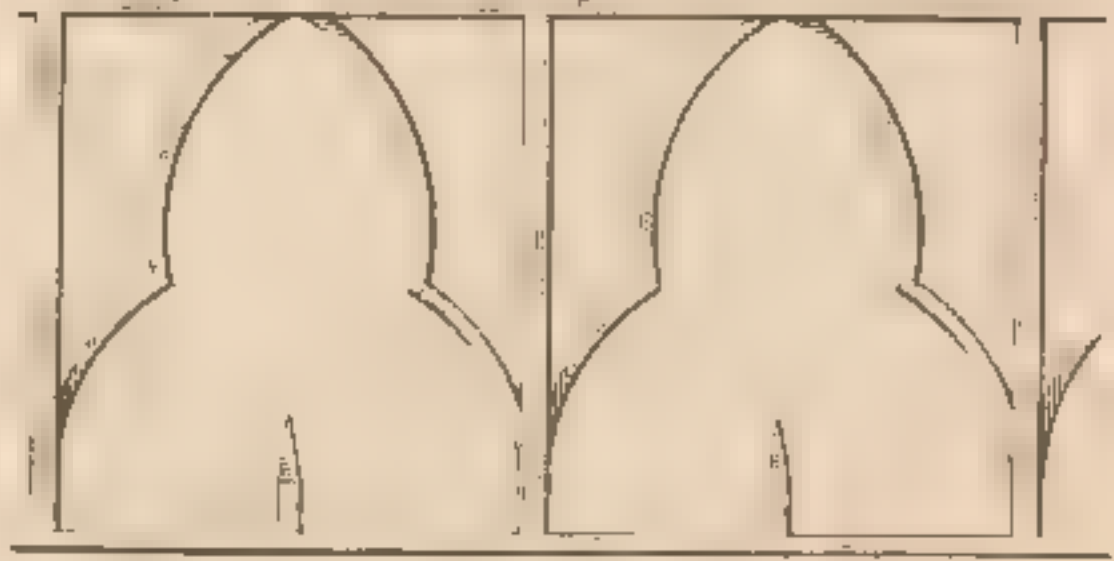
Nº 282



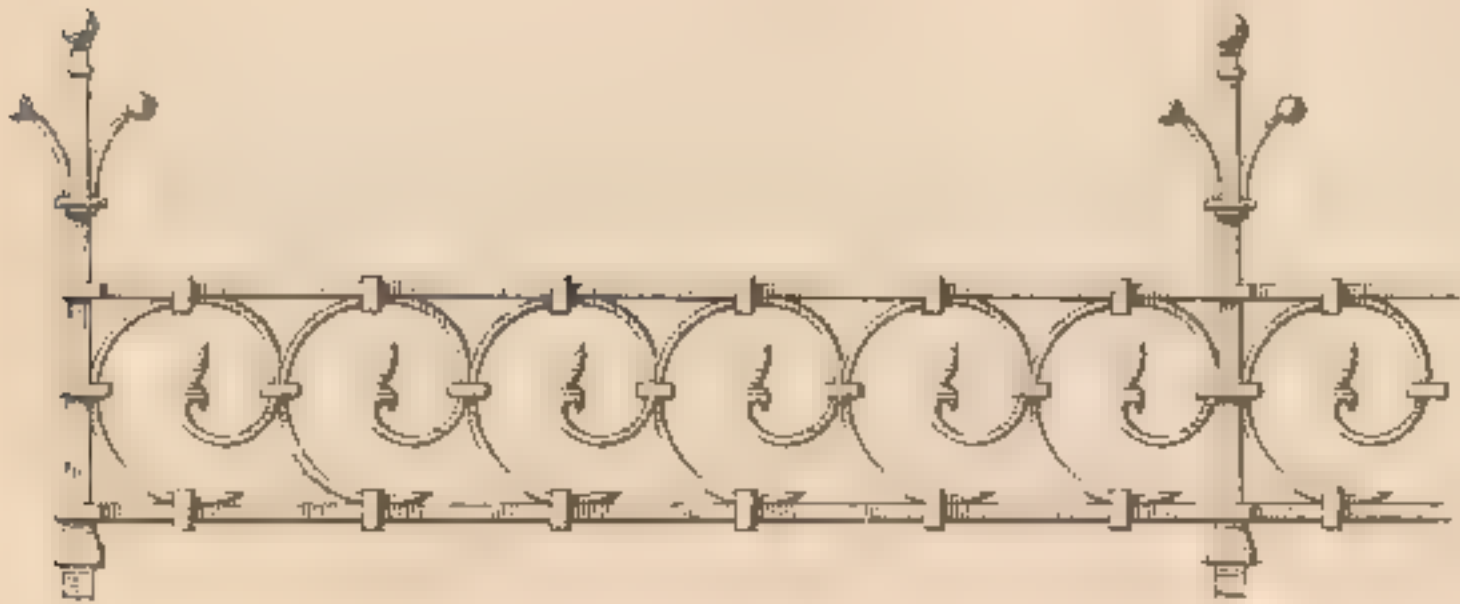
Nº 136



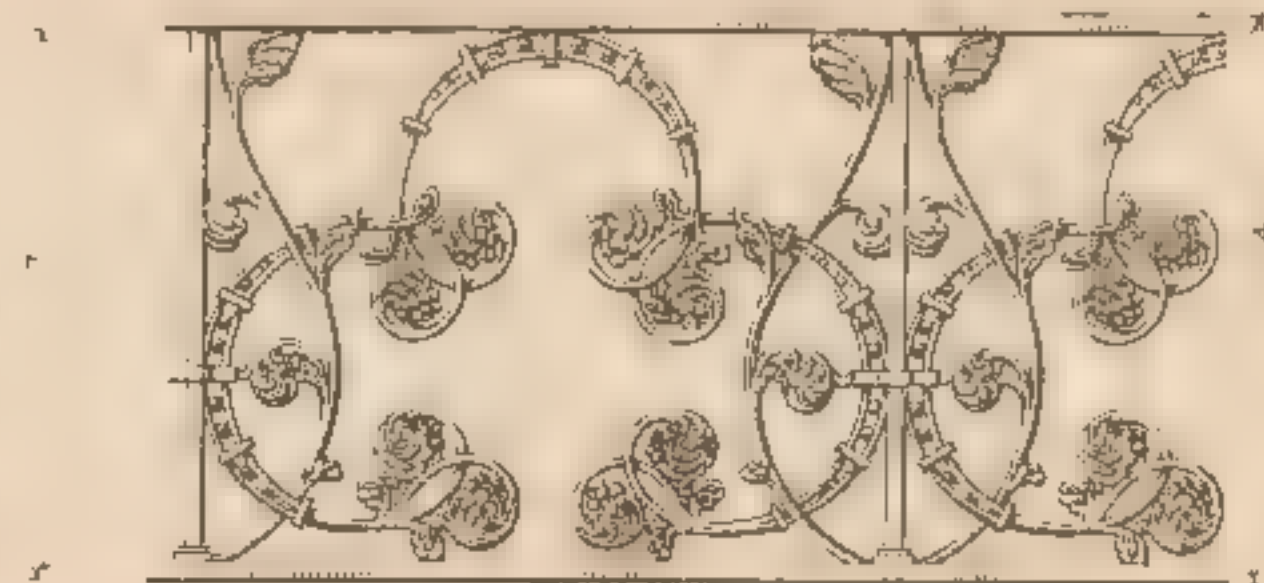
Nº 73



Nº 20



Nº 40



Nº 45



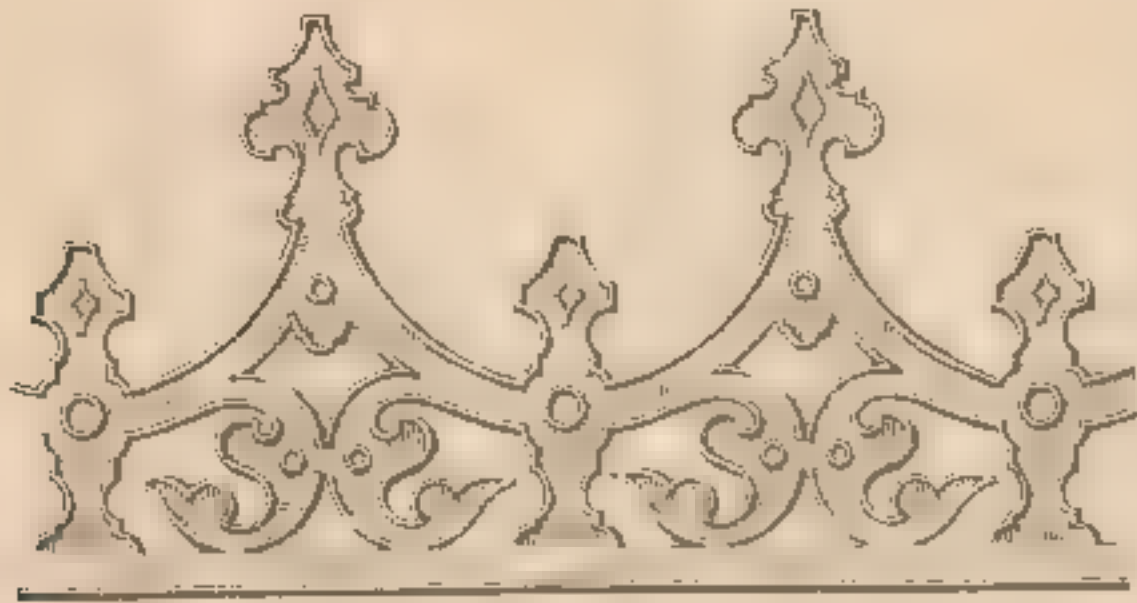
Nº 52



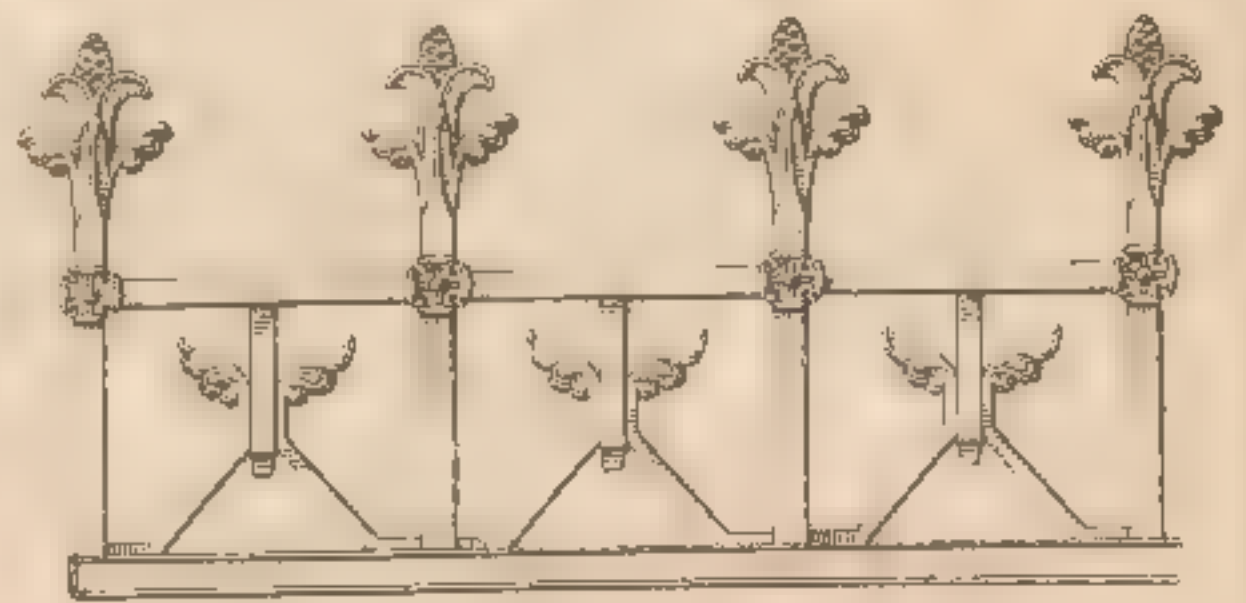
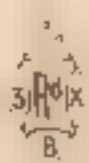
SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING &C

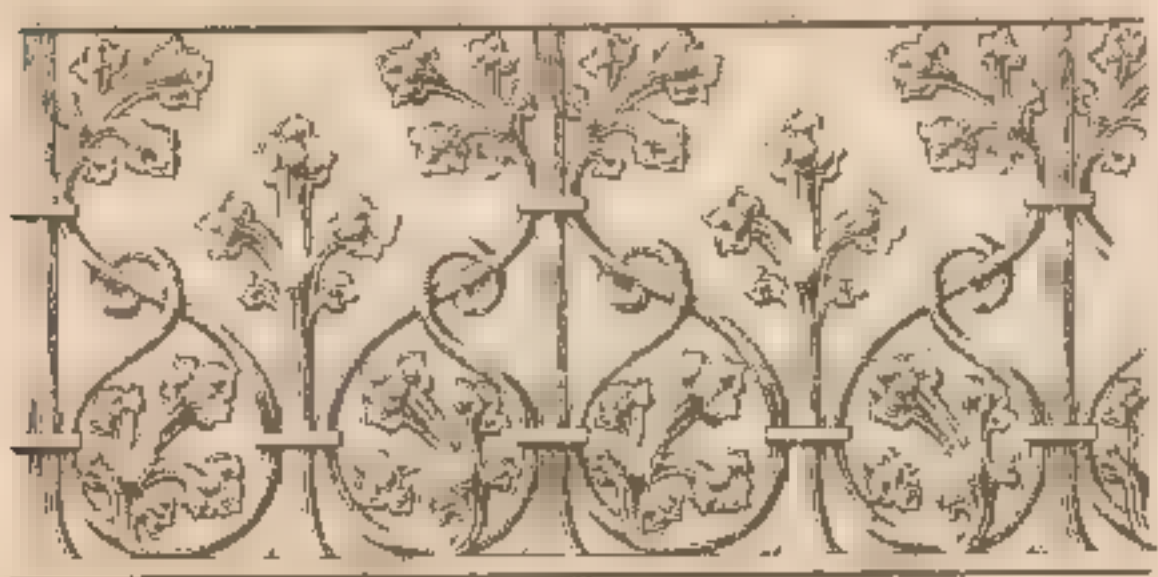
Nº 9



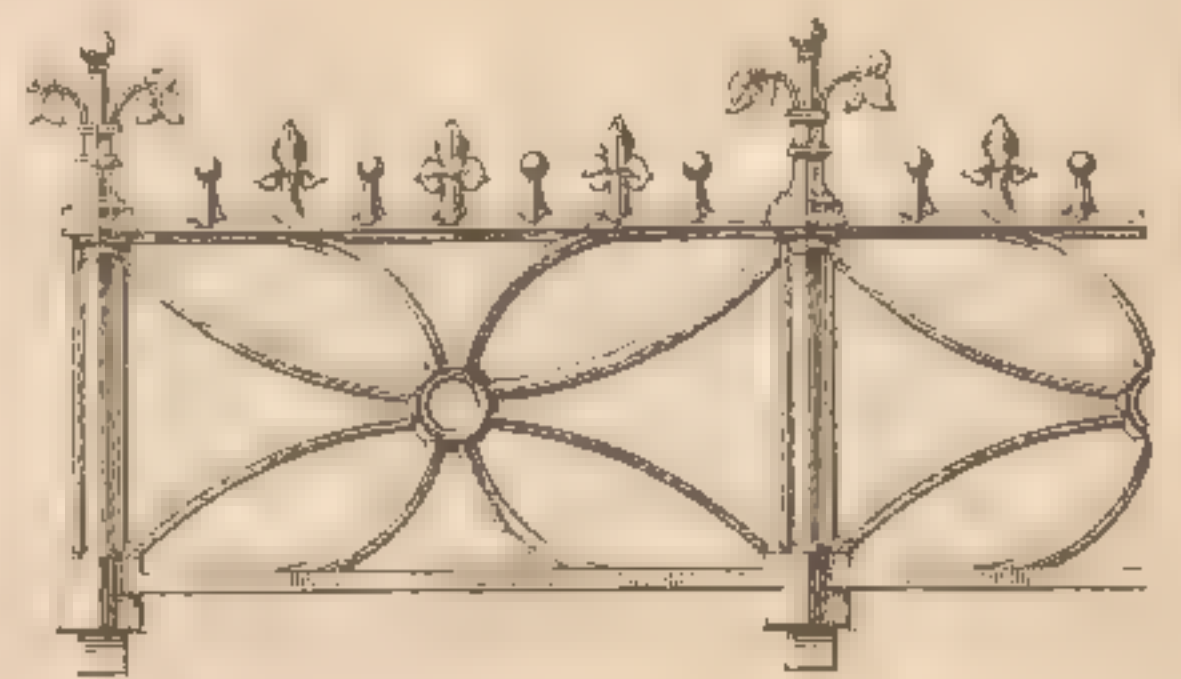
Nº 3



Nº 94



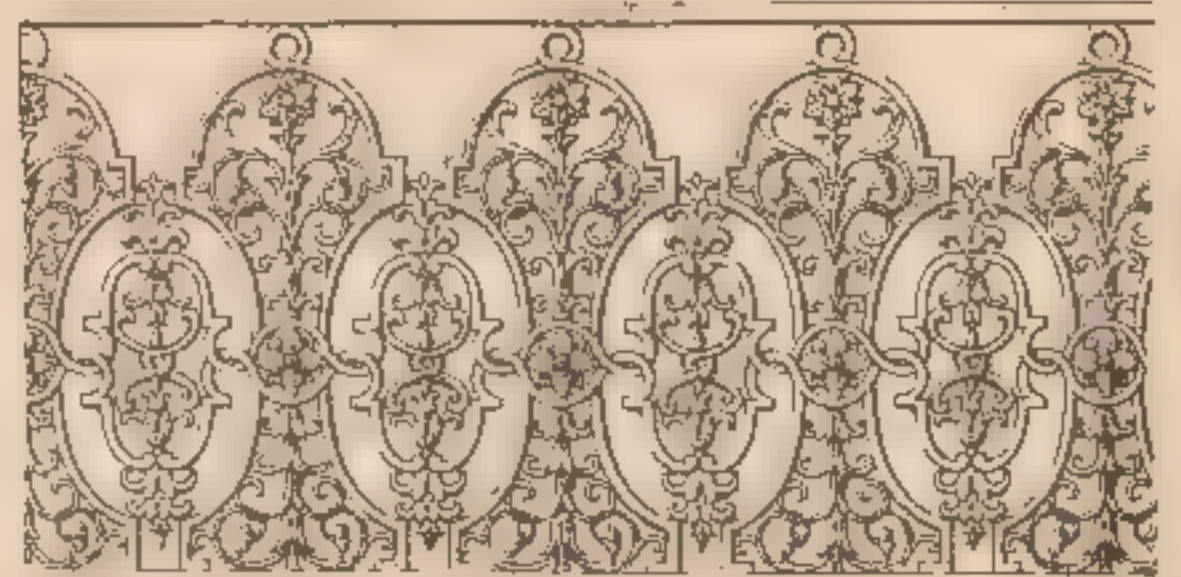
Nº 70



Nº 6

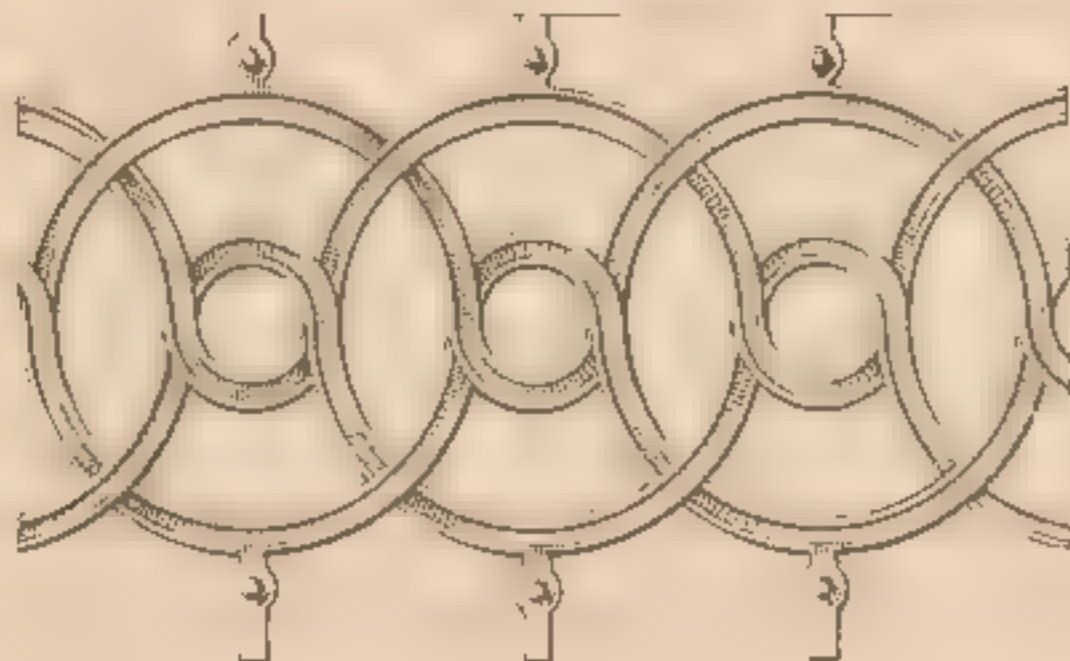


Nº 46



One face

Nº 50



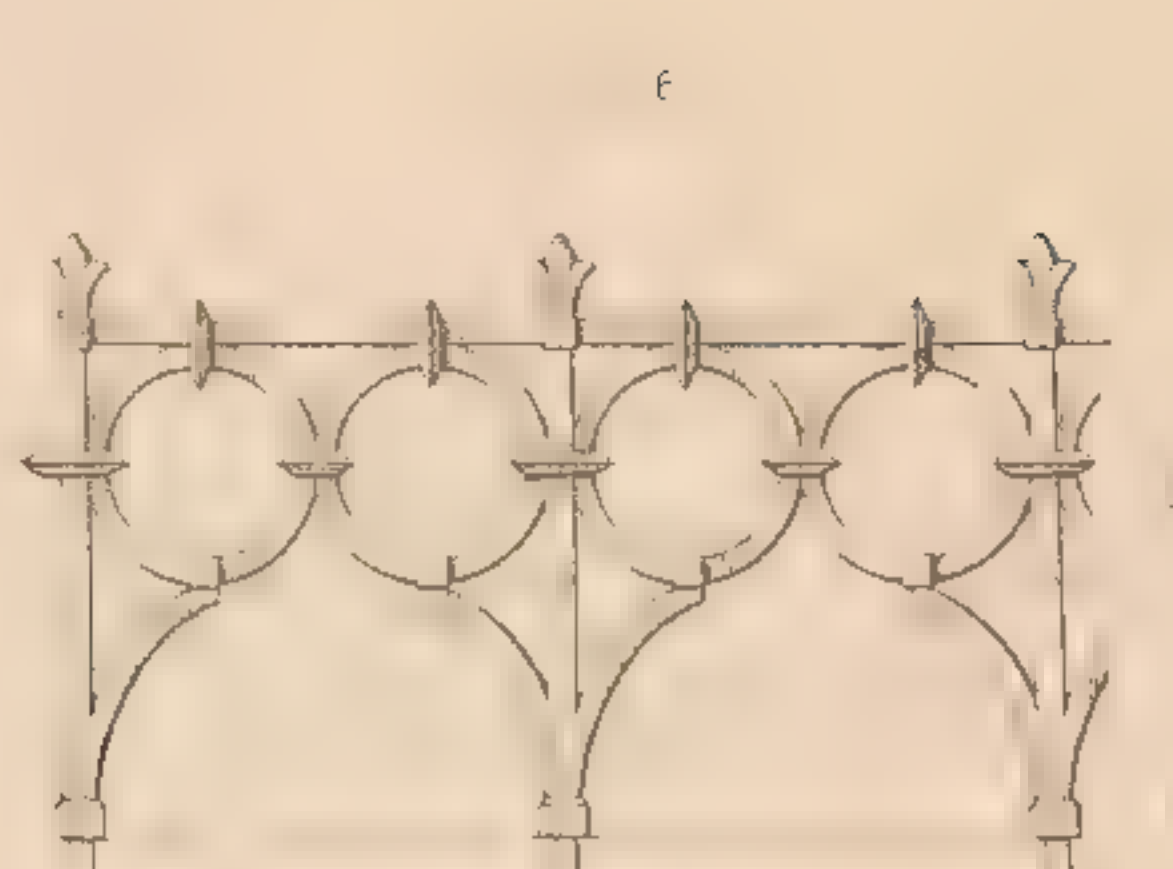
Nº 80



MACFARLANE'S RAILING &C



No 44



No 65



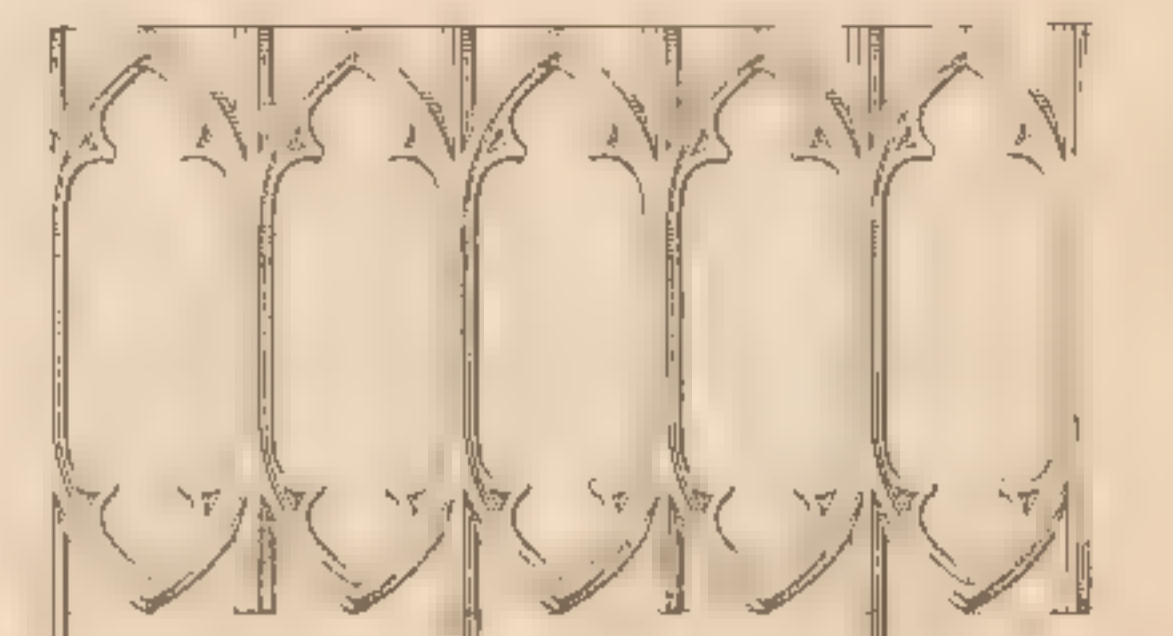
No 389



No 372



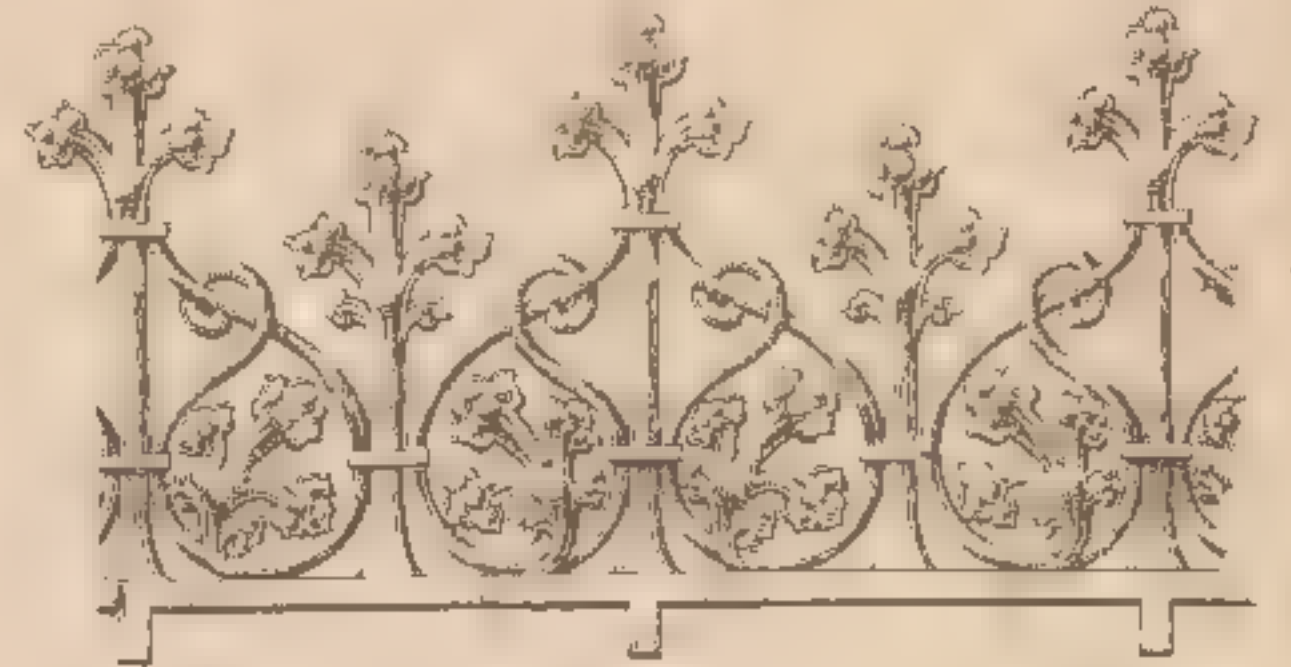
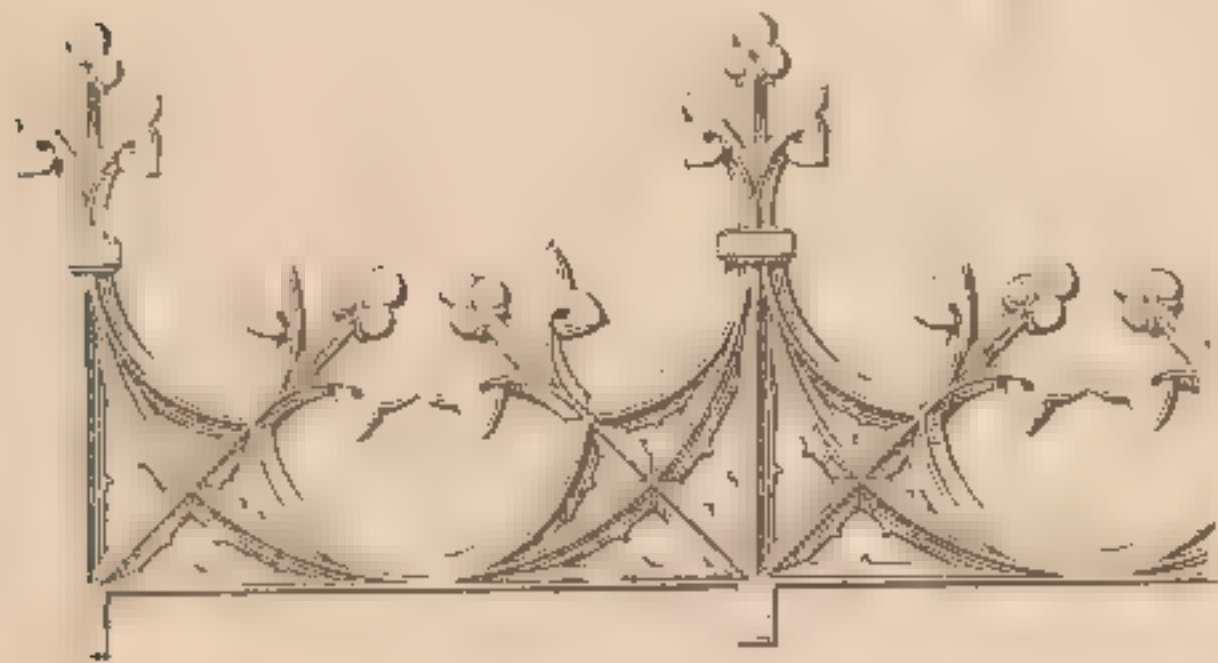
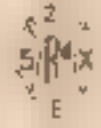
No 392



SCALE INCH = 1 FOOT

MACFARLANE'S RAILING & C

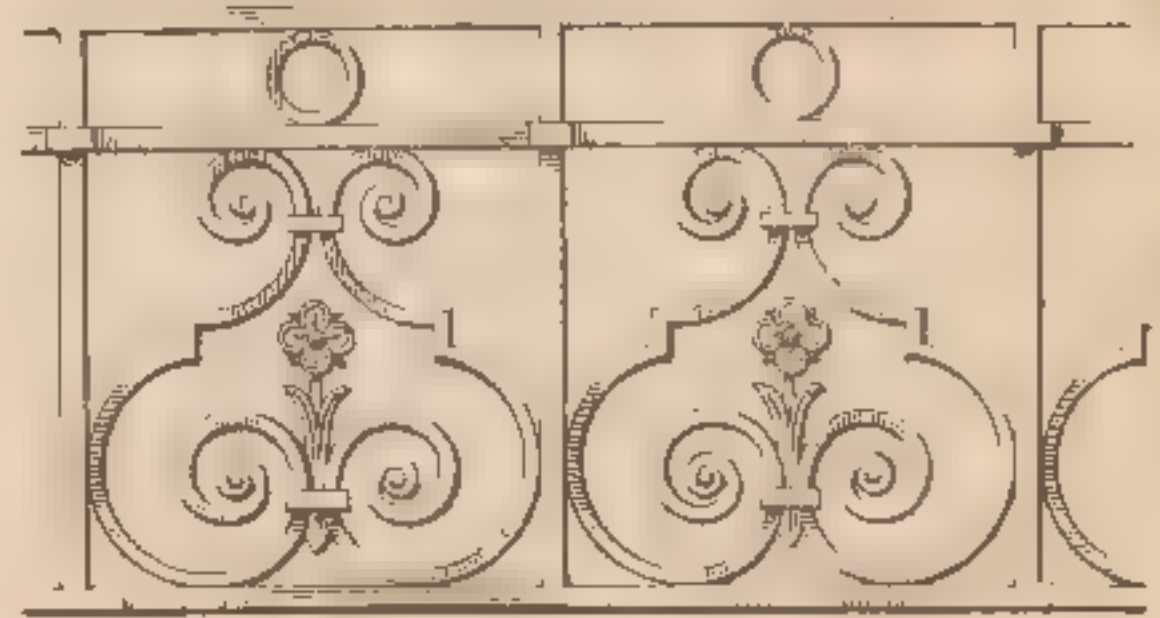
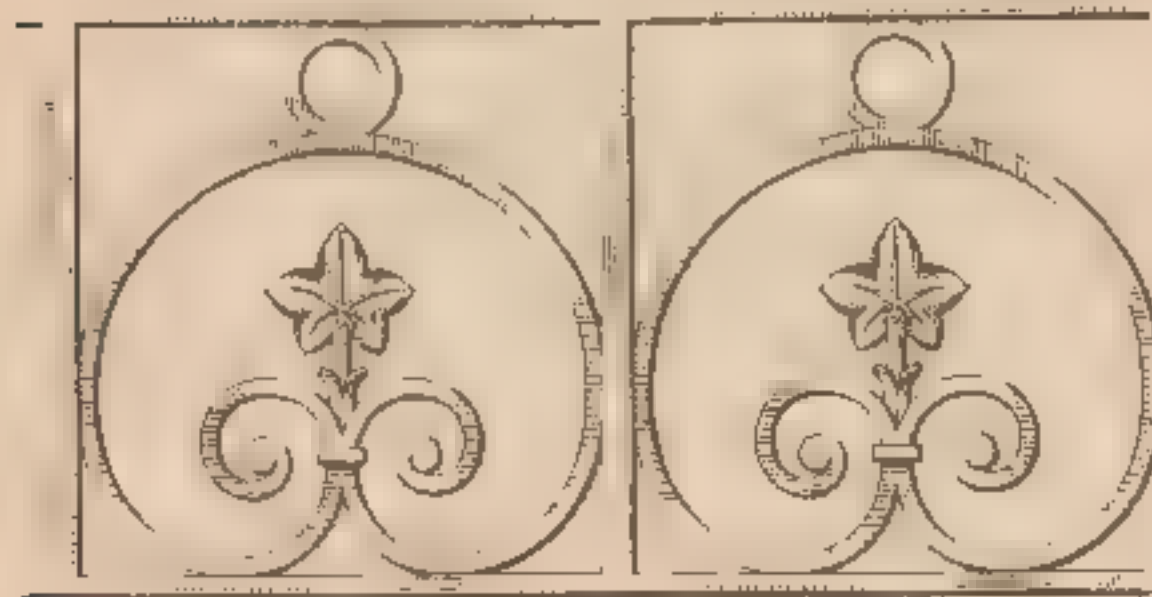
Nº 23



Nº 203

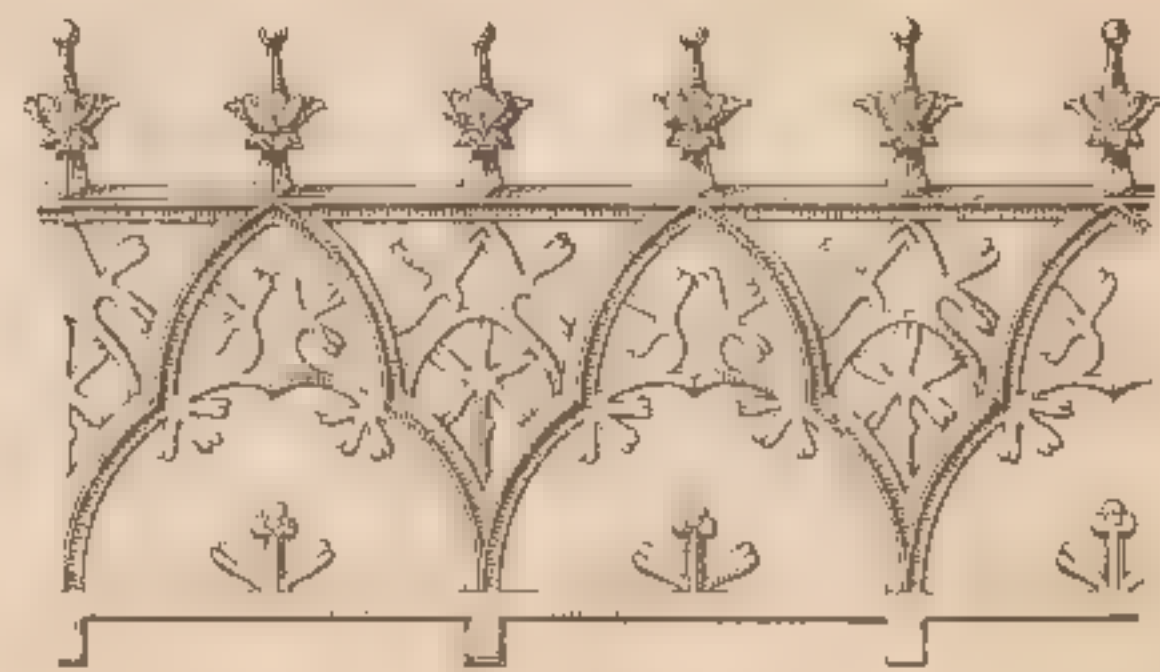
Nº 204

16
1/4
1/2

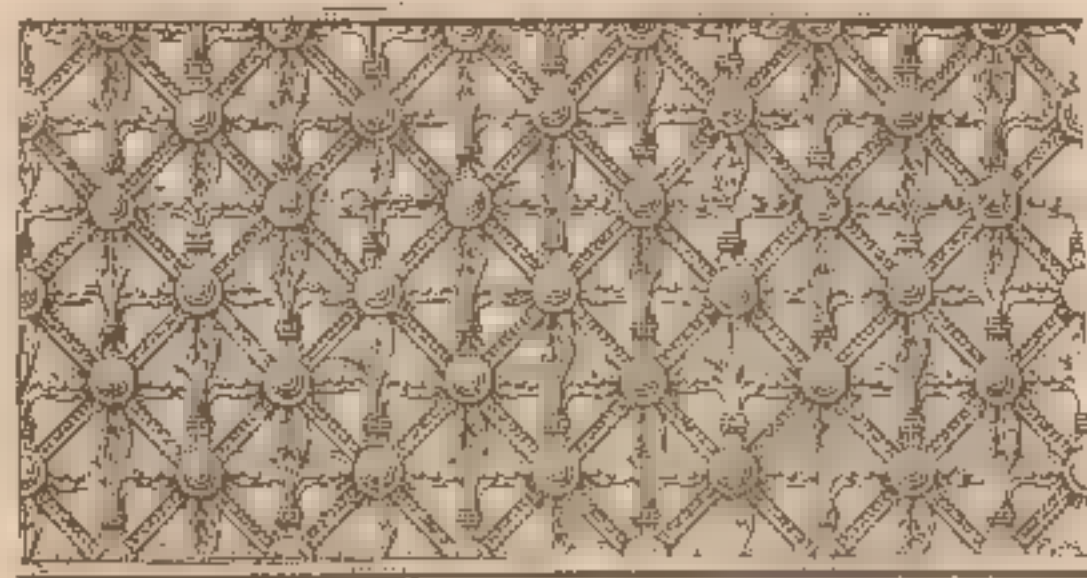
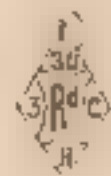


Nº 99

Nº 44

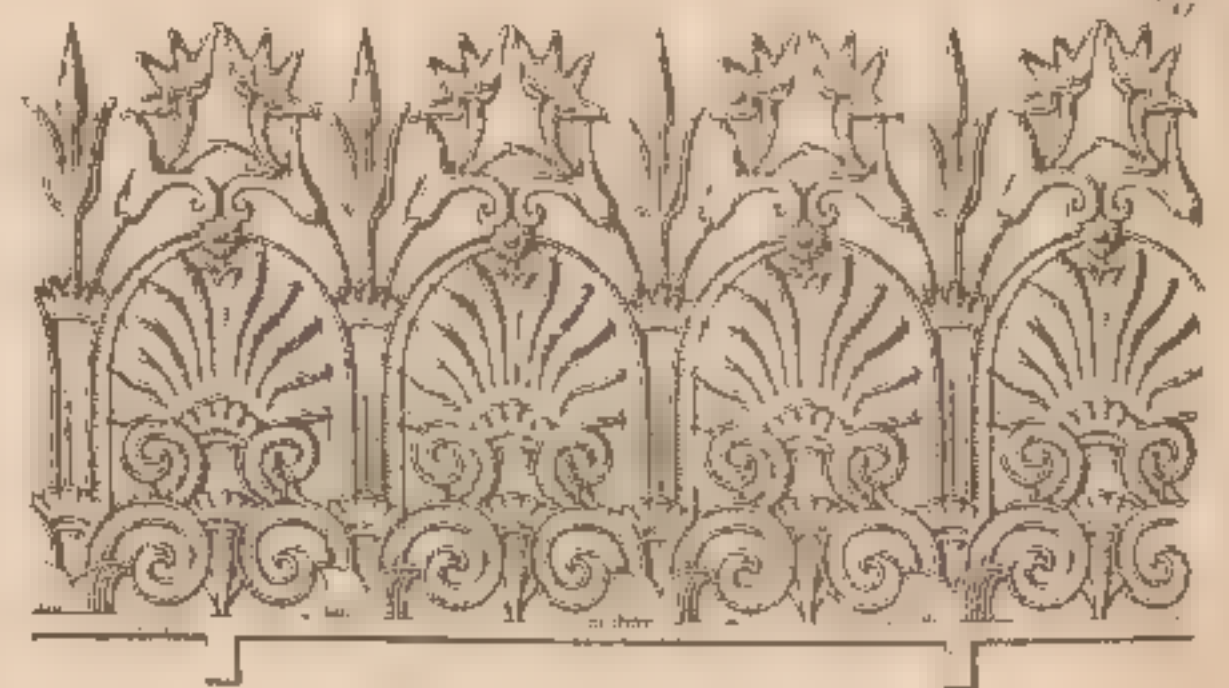
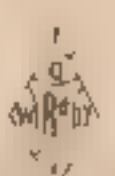


Nº 46



One face

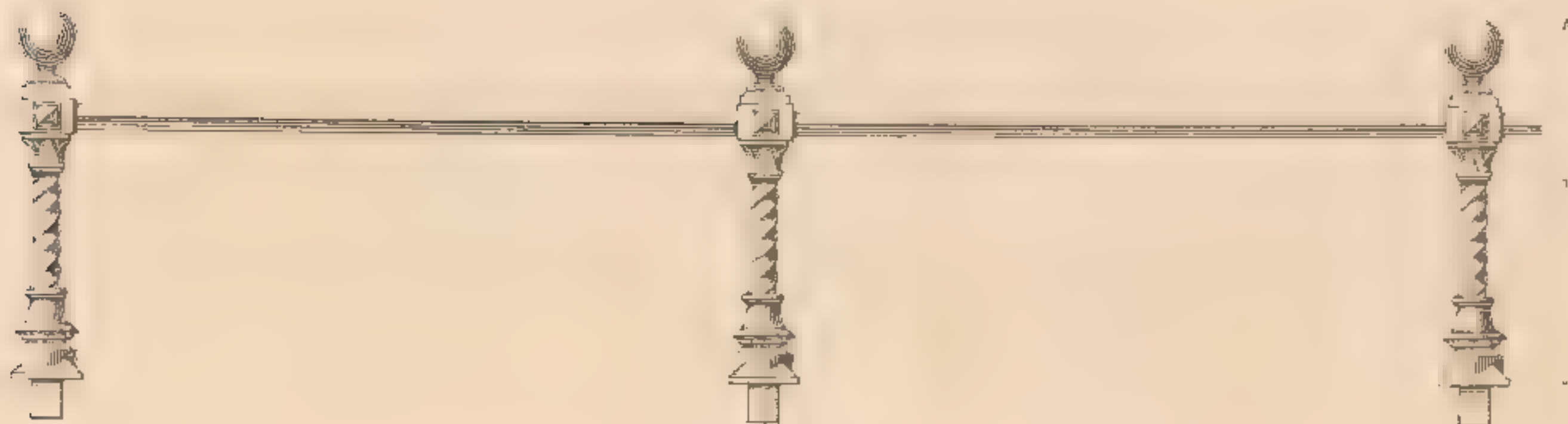
Nº 47



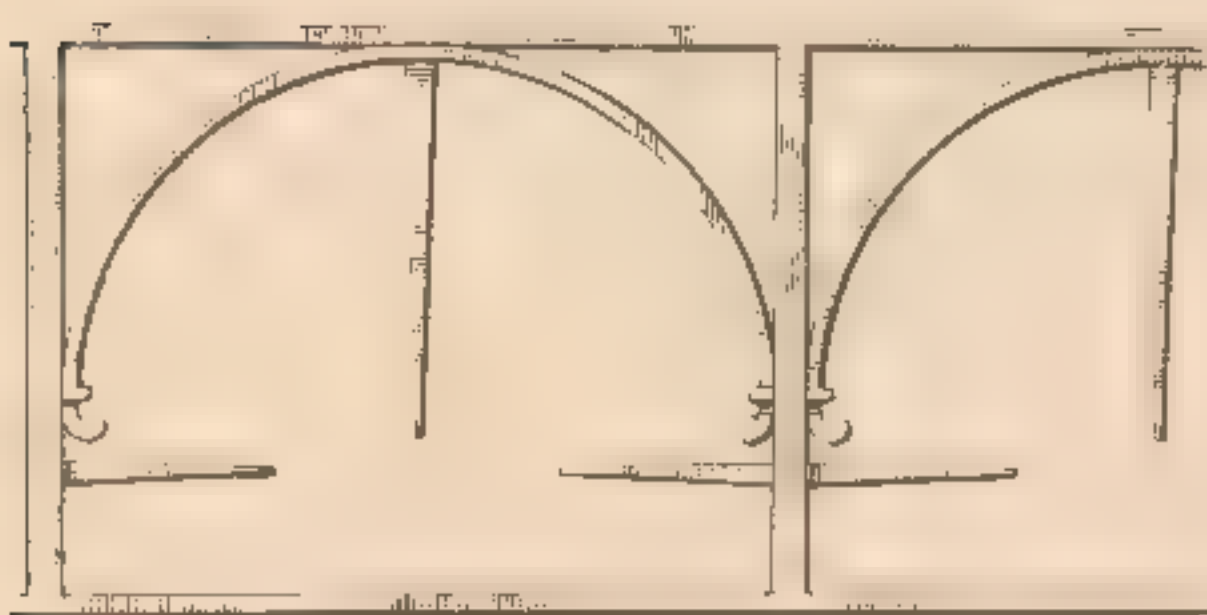
SCALE 1 INCH = FOOT

MACFARLANE'S RAILING & CO

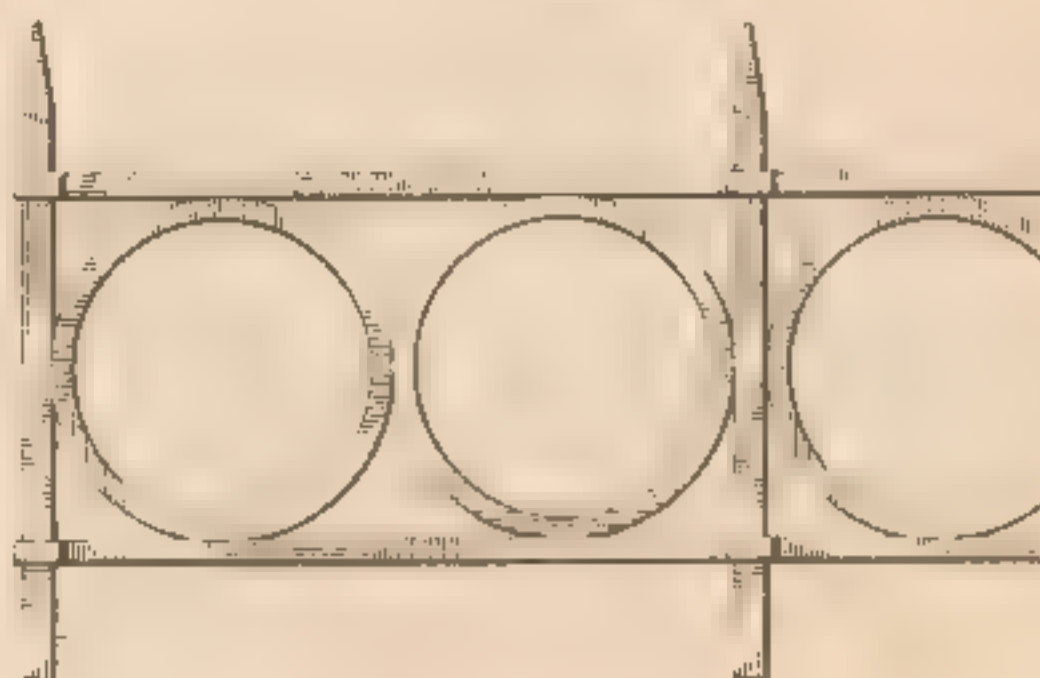
Nº 430



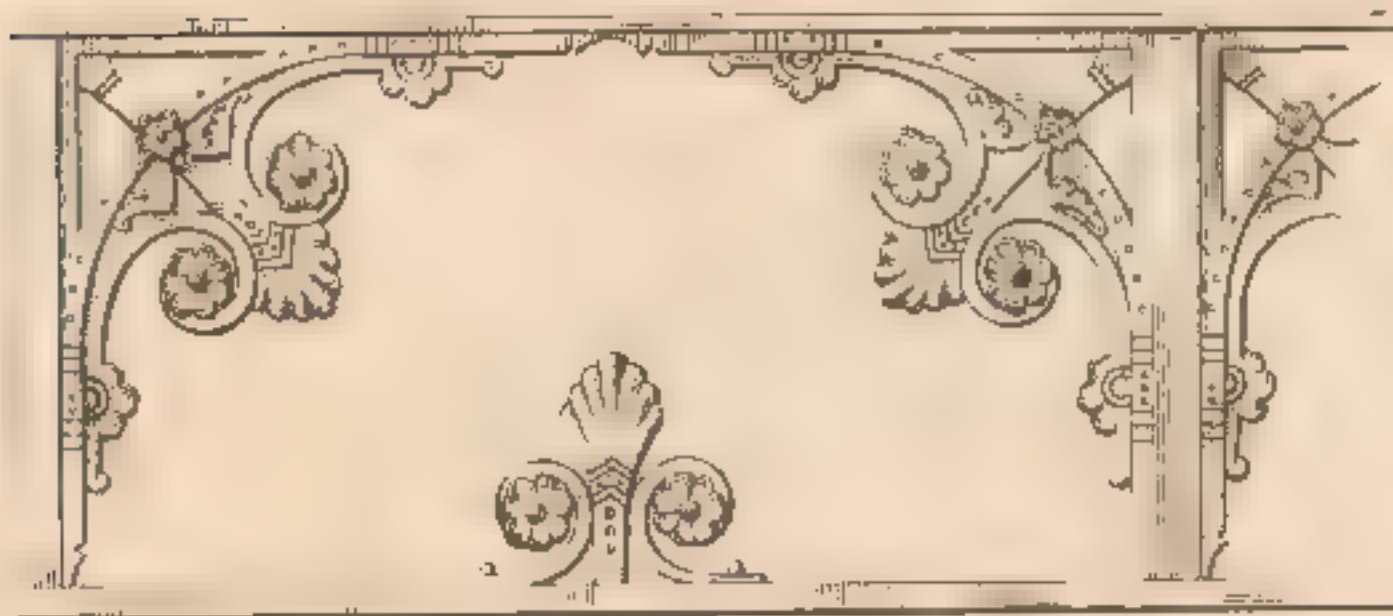
Nº 67



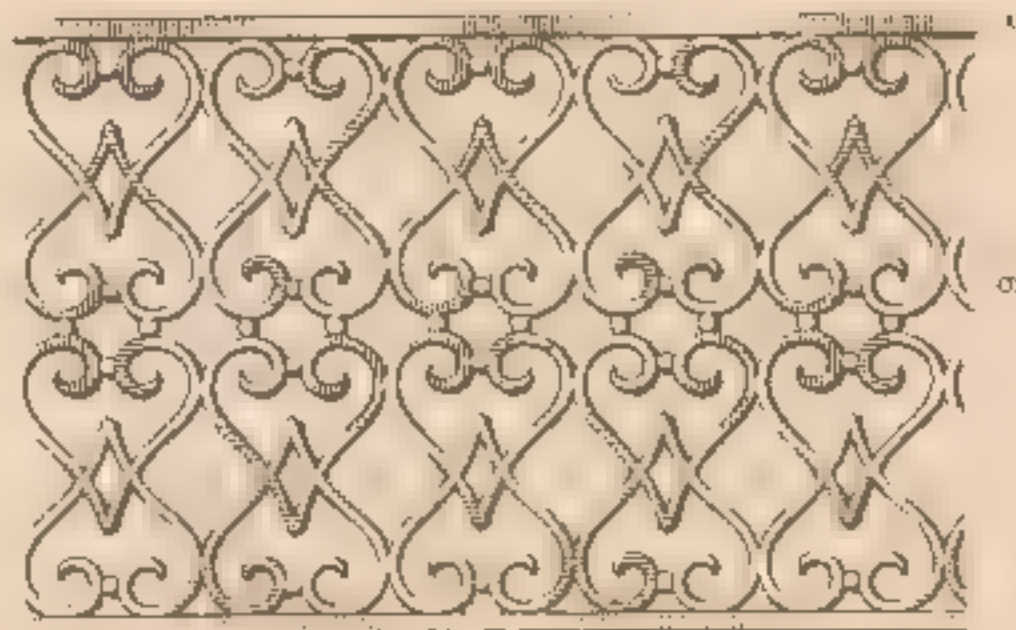
Nº 180



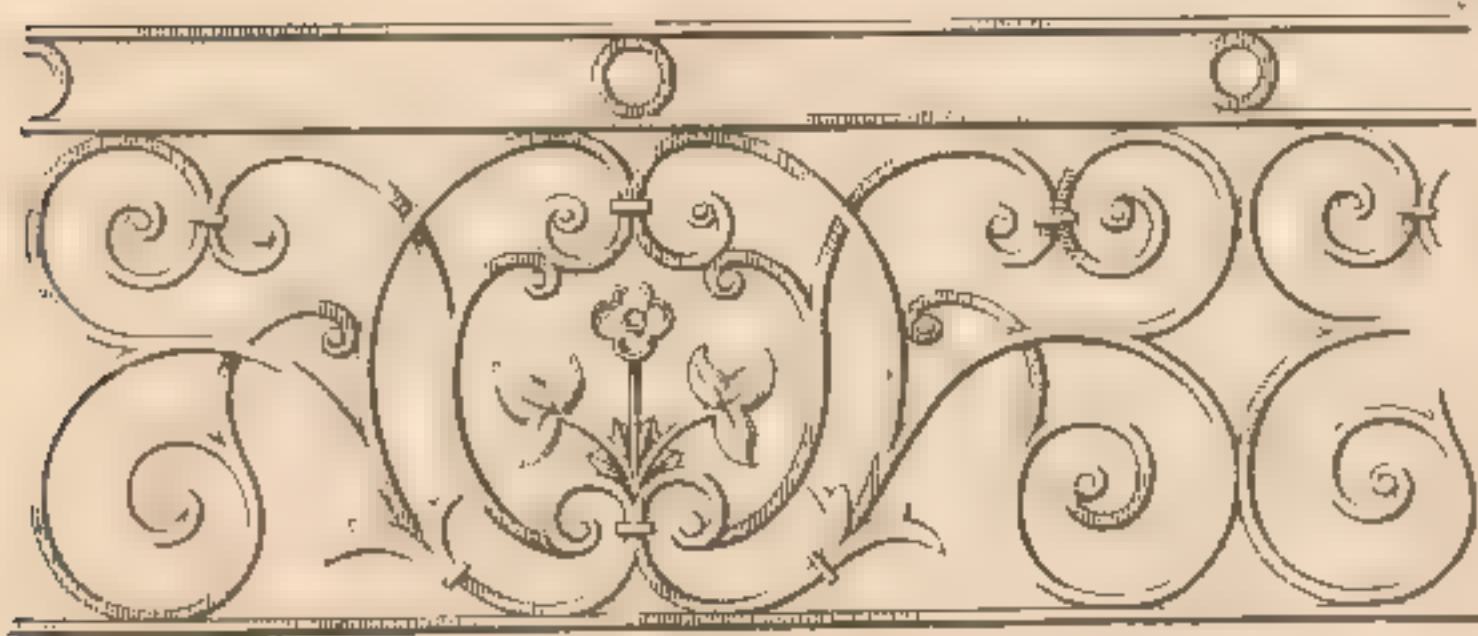
Nº 62



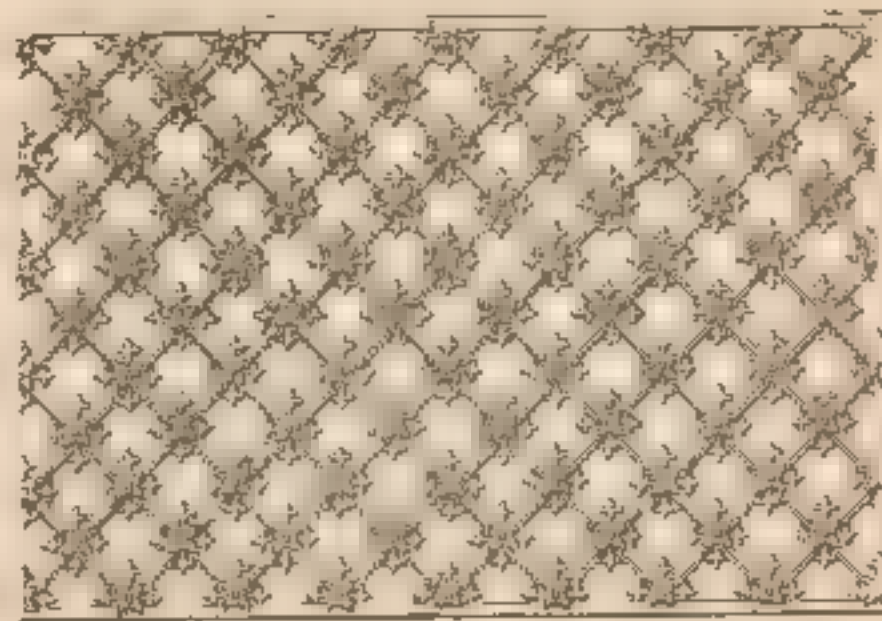
Nº 294



Nº 200



Nº .02

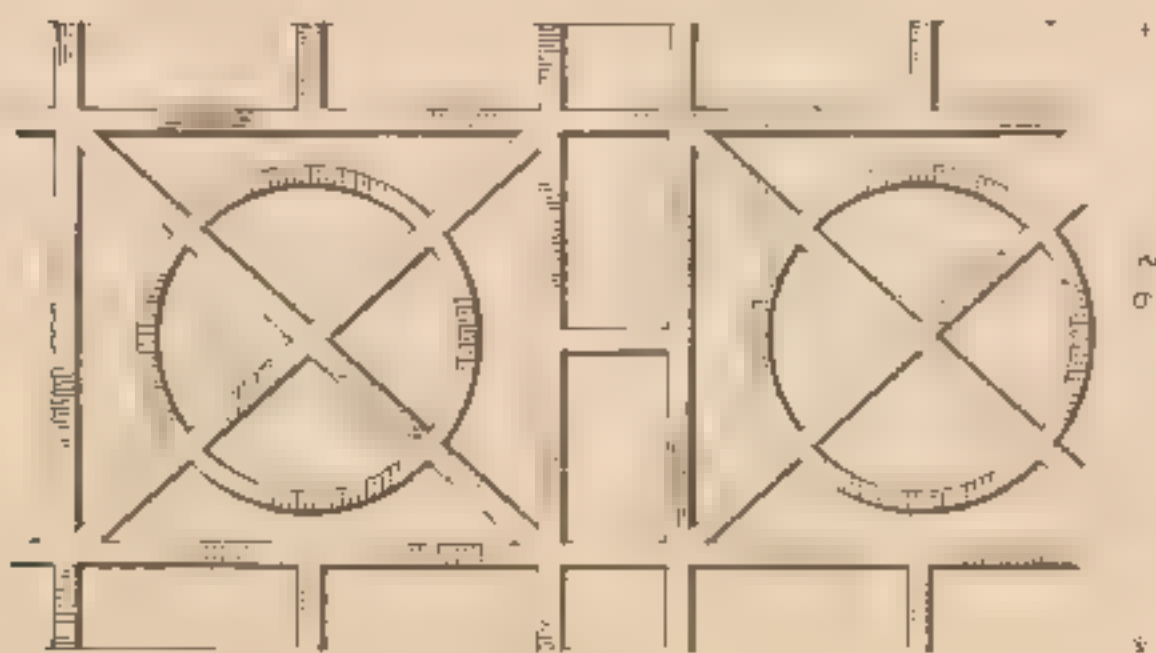


One face

SCALE 1 IN = 1 FT

MACFARLANE'S RAILING & CO

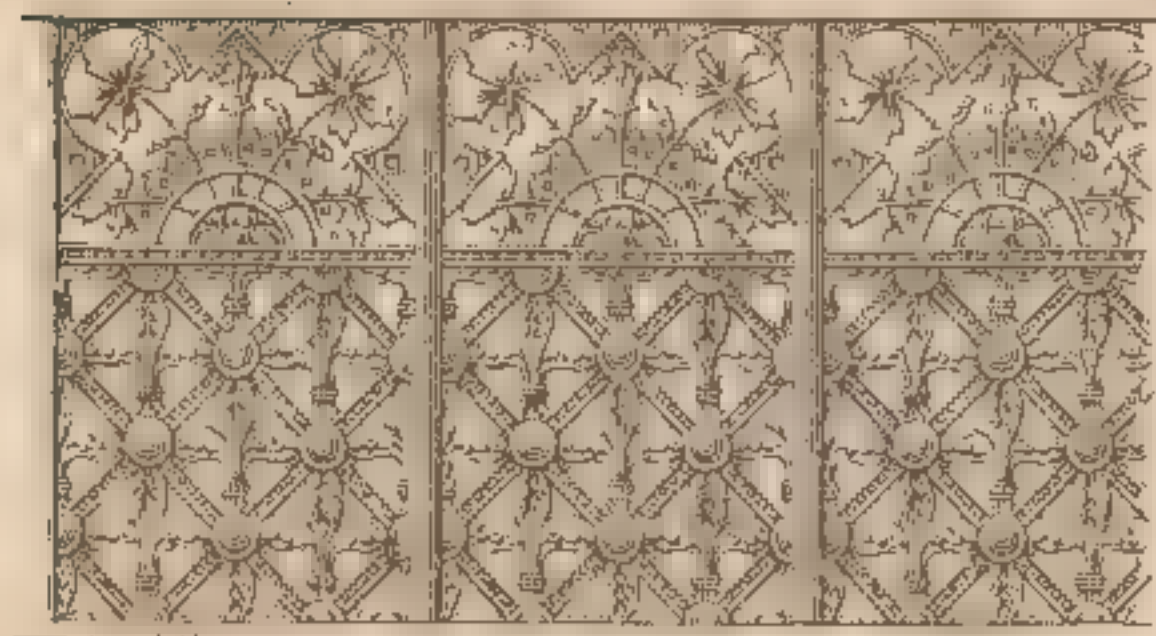
Nº 328



Nº 04

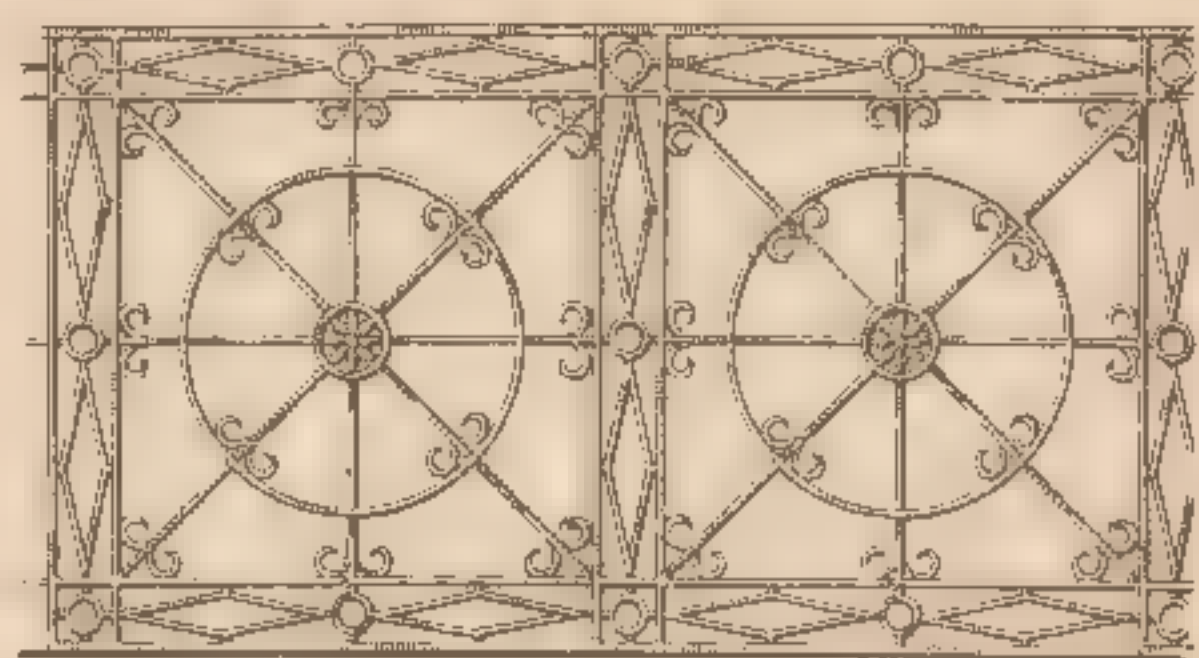


Nº 54

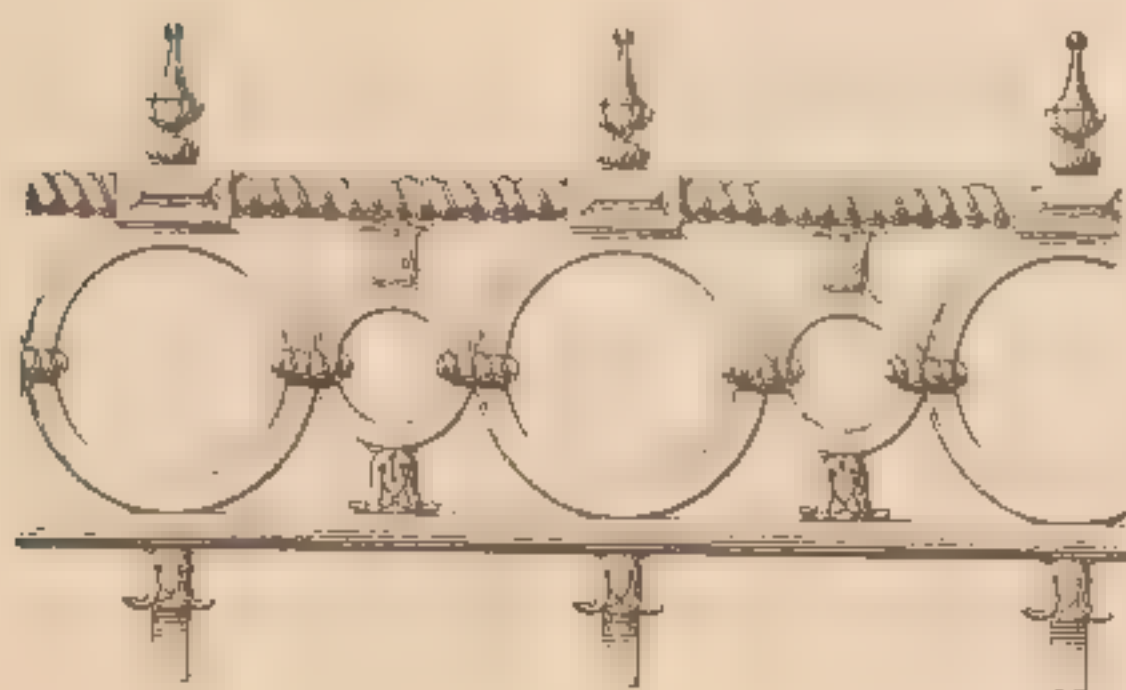


One face

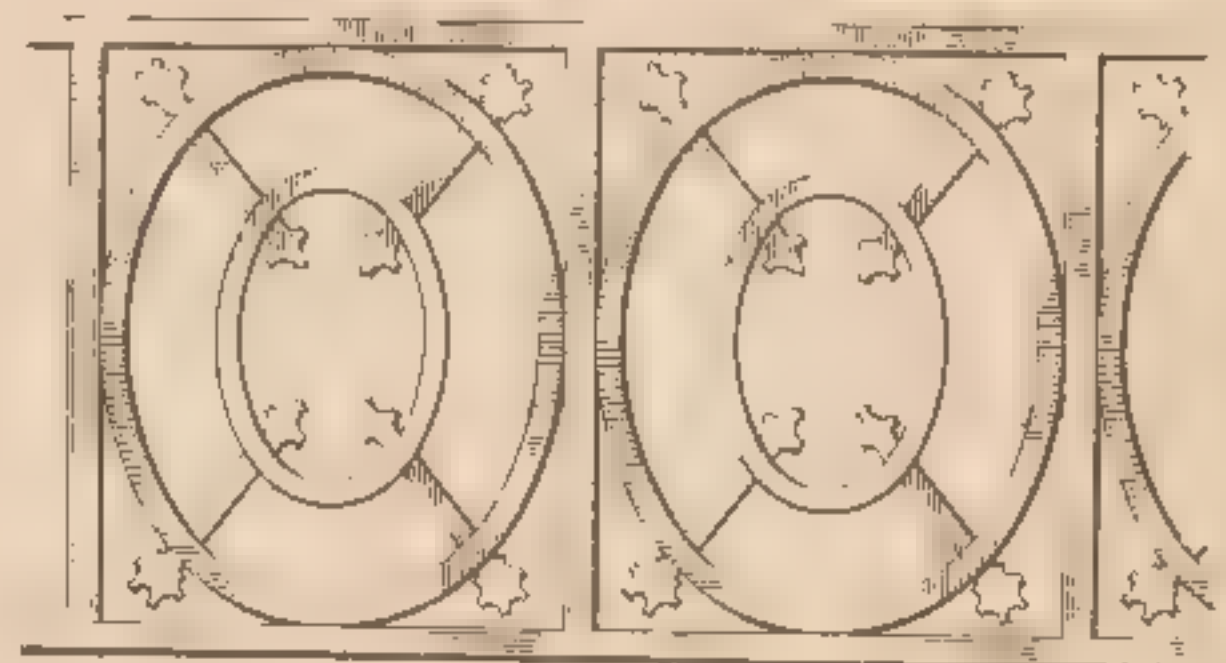
Nº 7



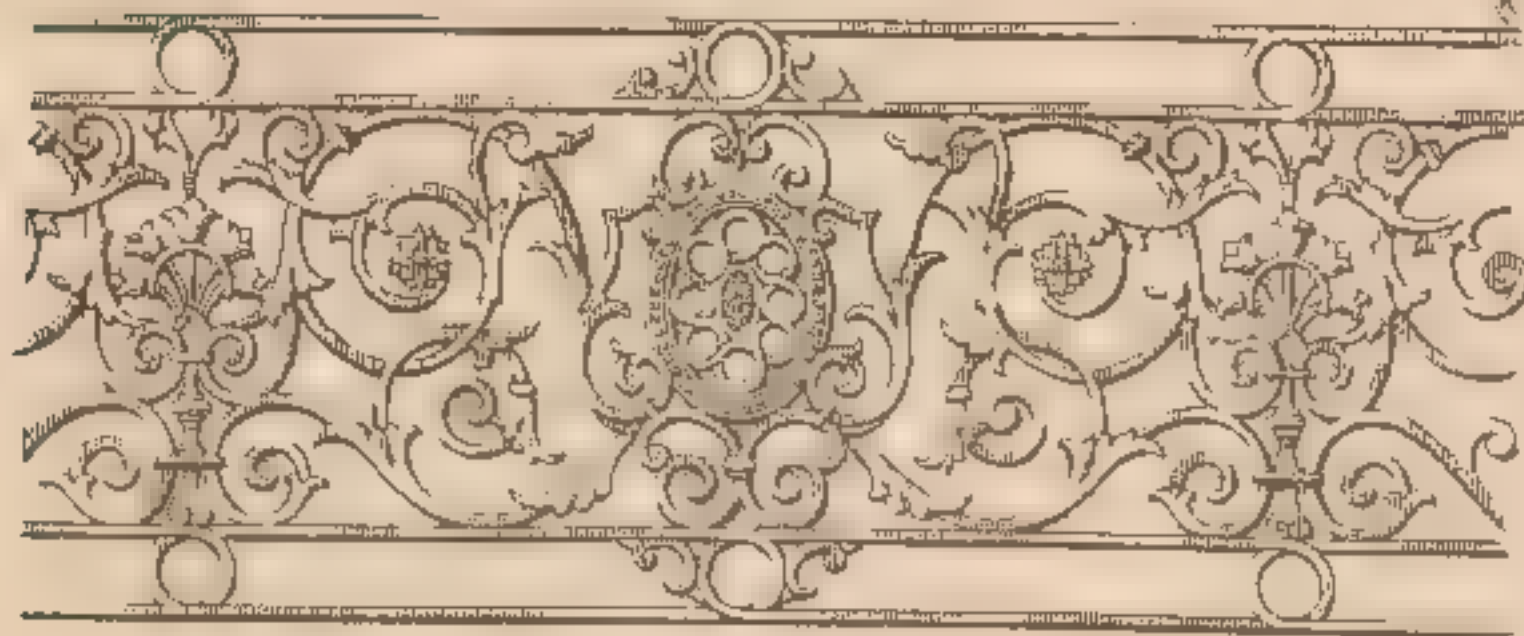
Nº 65



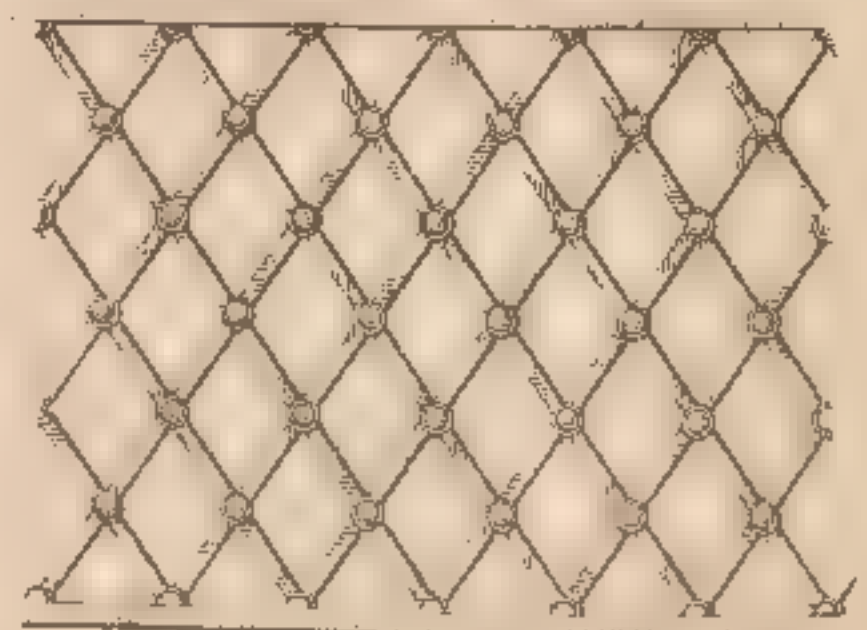
Nº 47



Nº 437



Nº 398

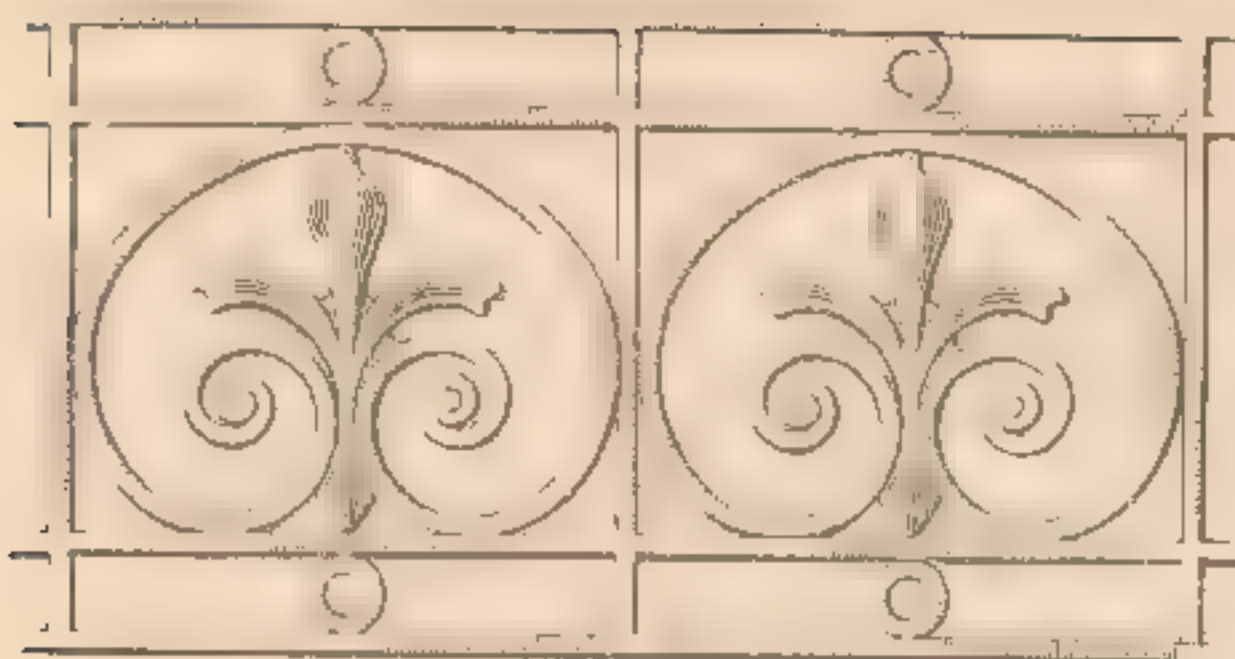


One face

SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING & CO

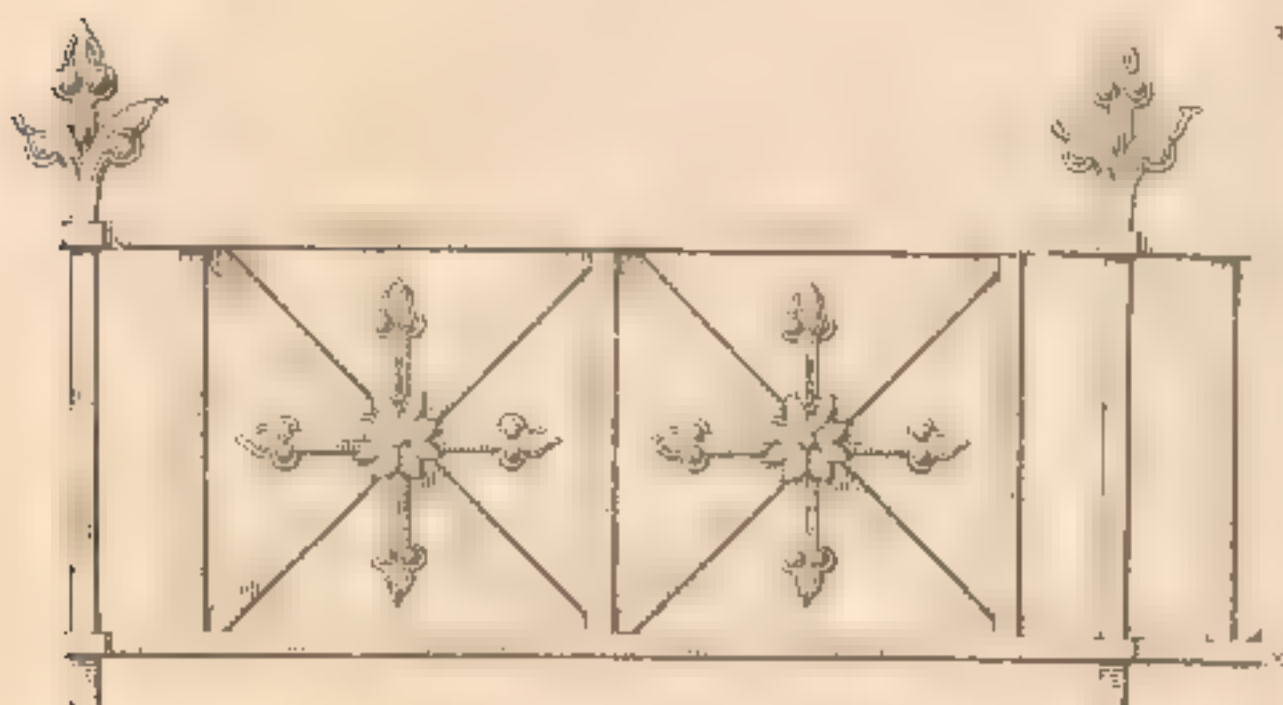
N 48



N 121



N 2



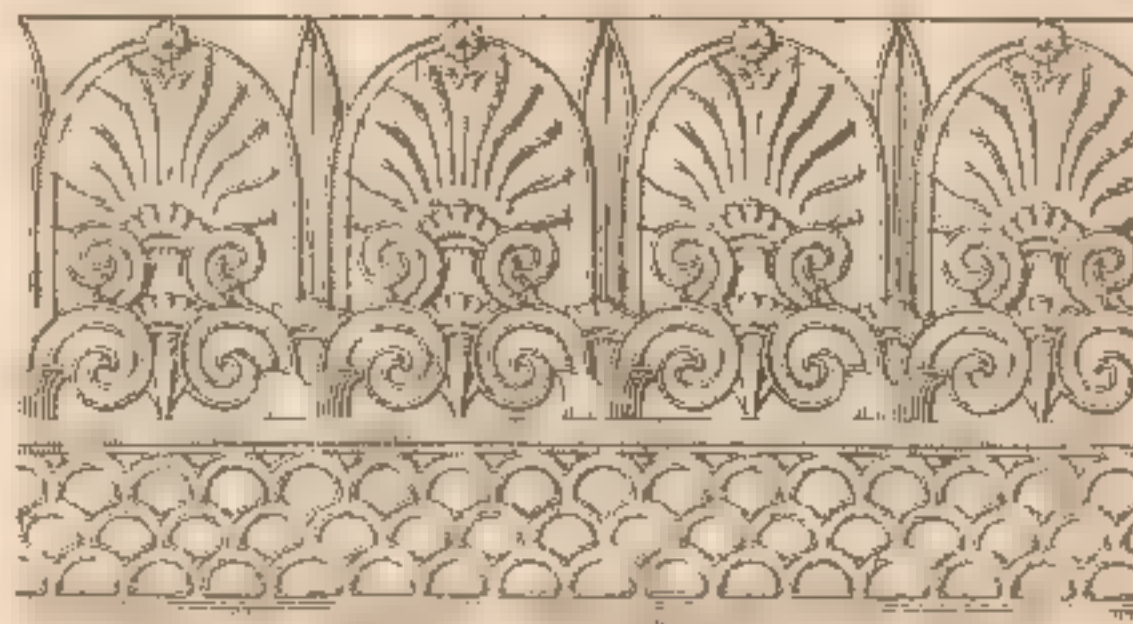
N 40



N 81

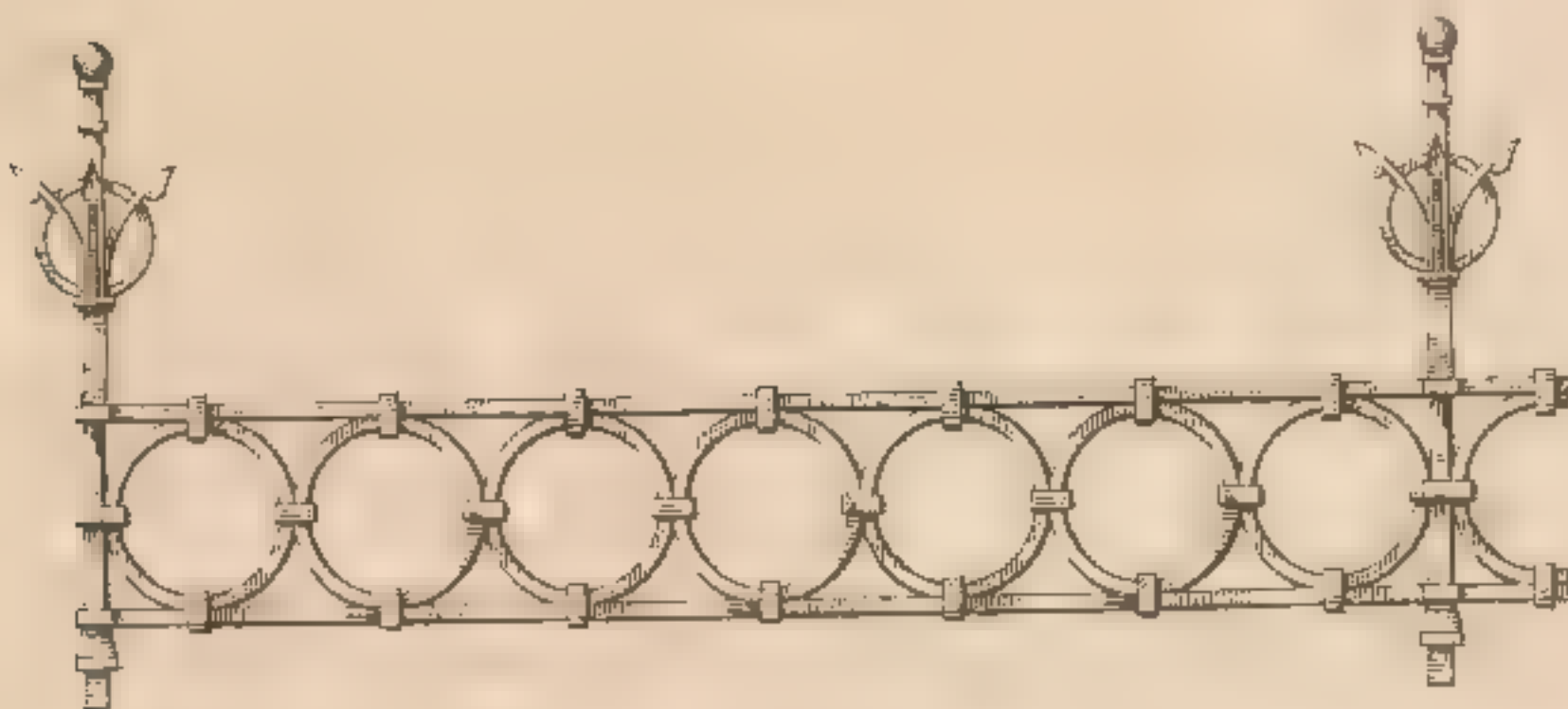


N 57

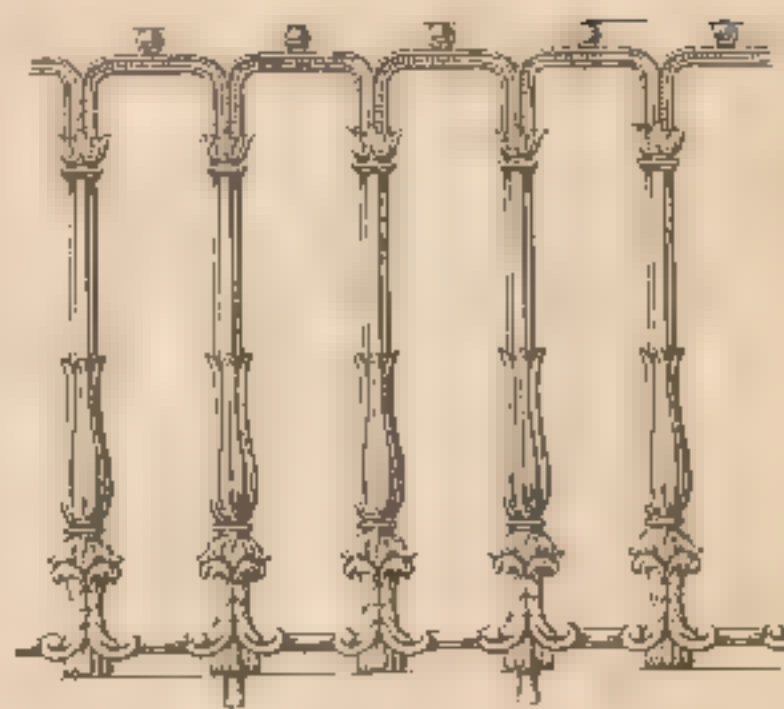


MACFARLANE'S RAILING &C

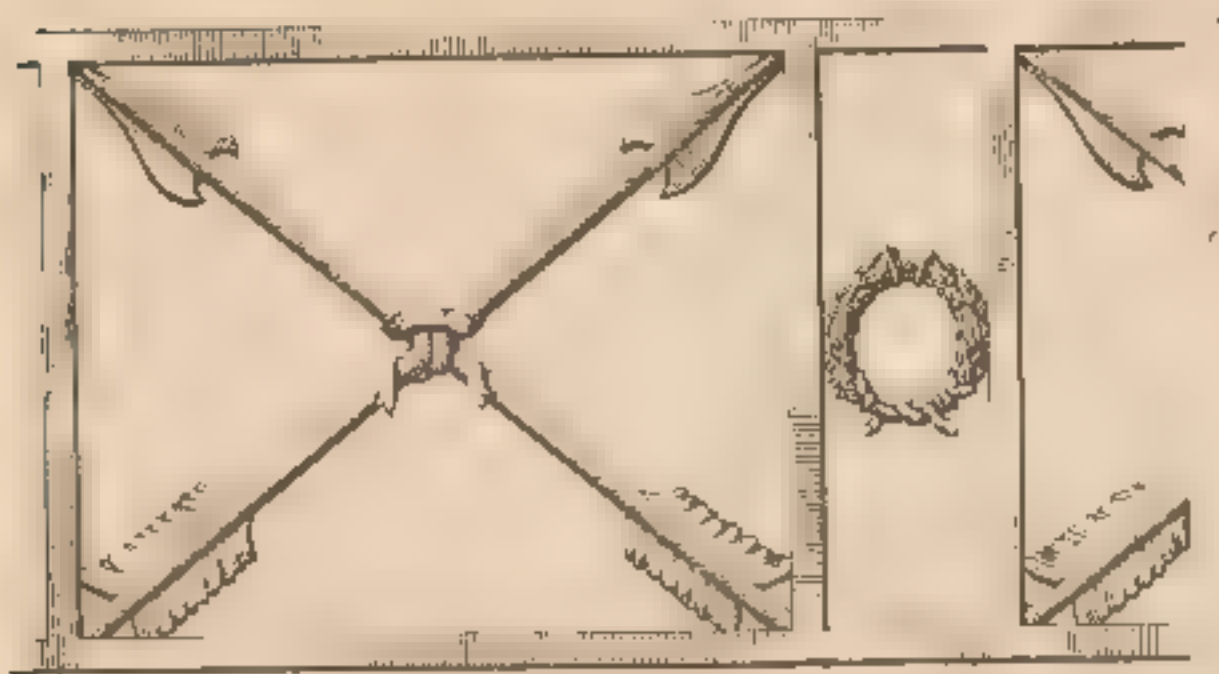
N^o 2



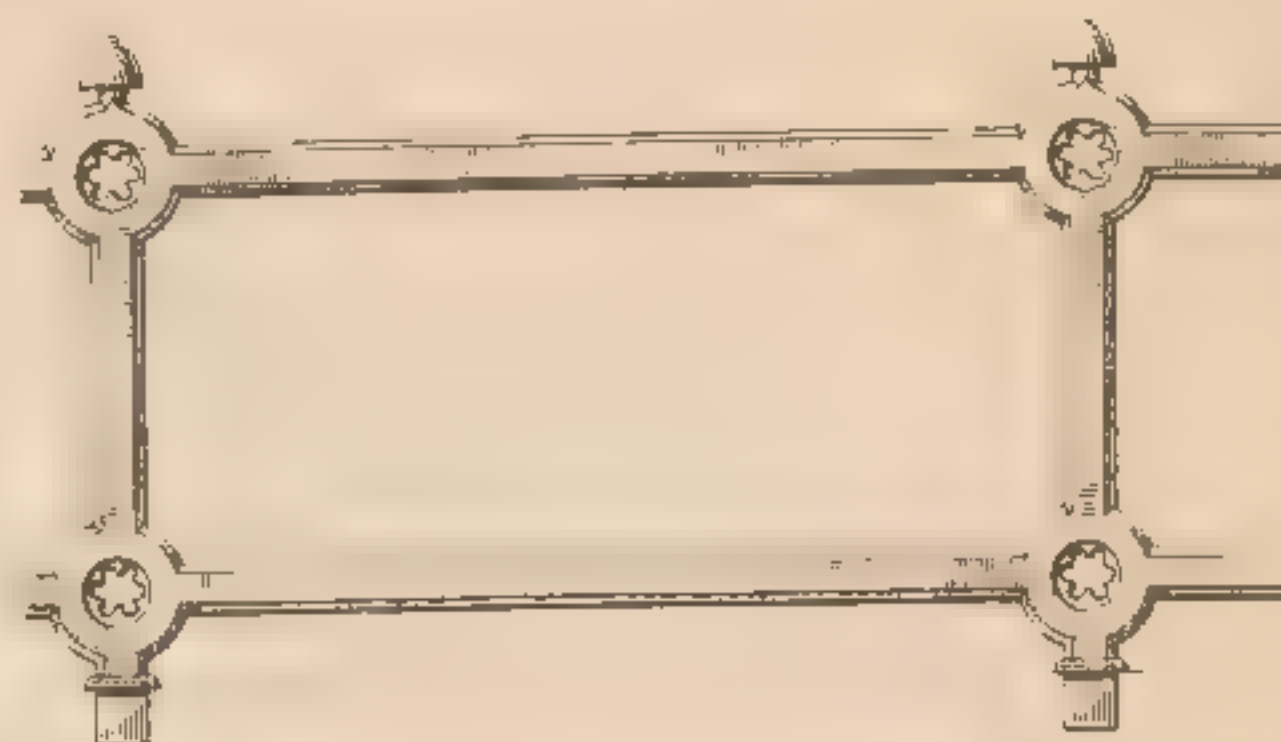
N^o 395



N^o 40



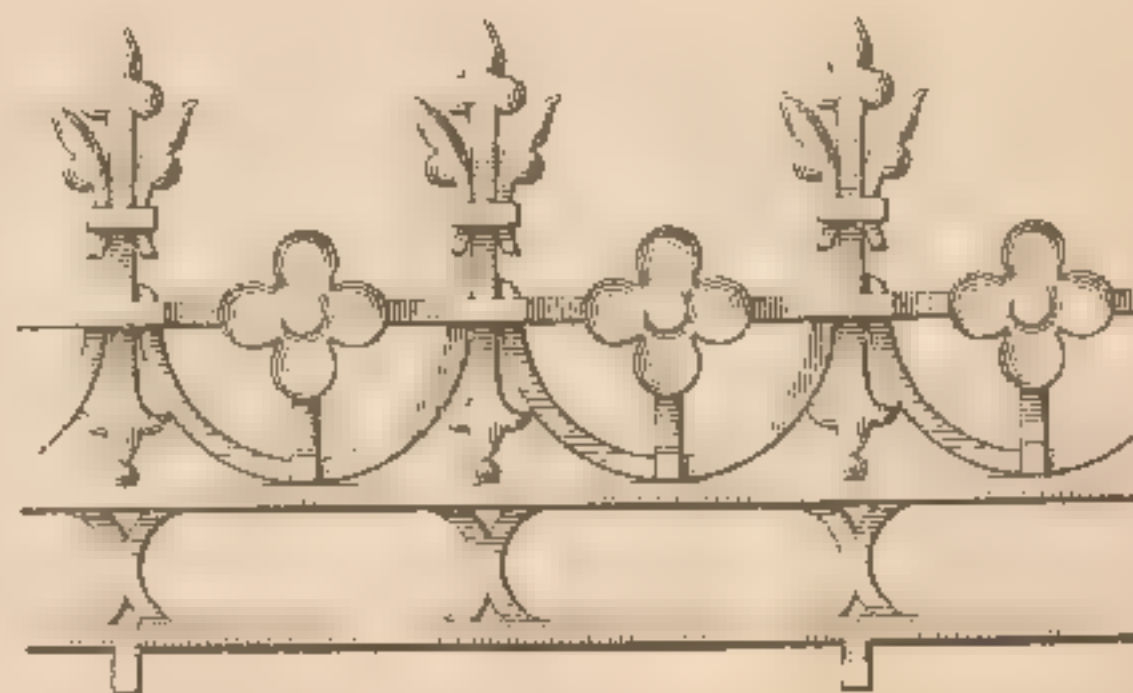
N^o 43



N^o 45



N^o 460



Standards charged extra

N^o 76

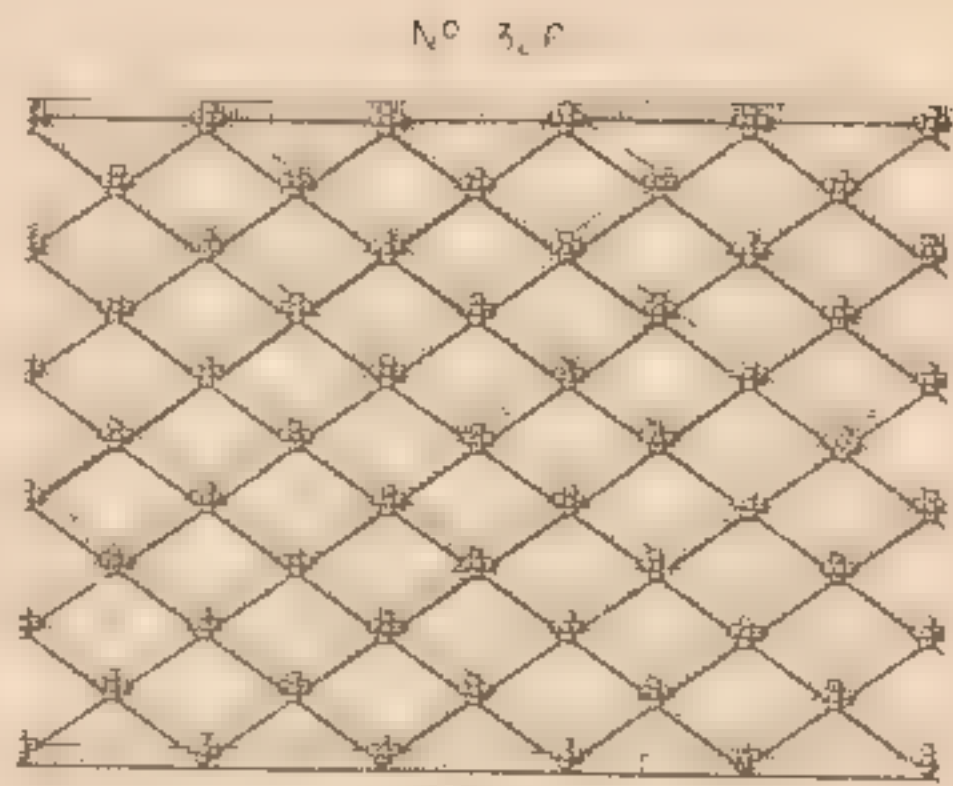
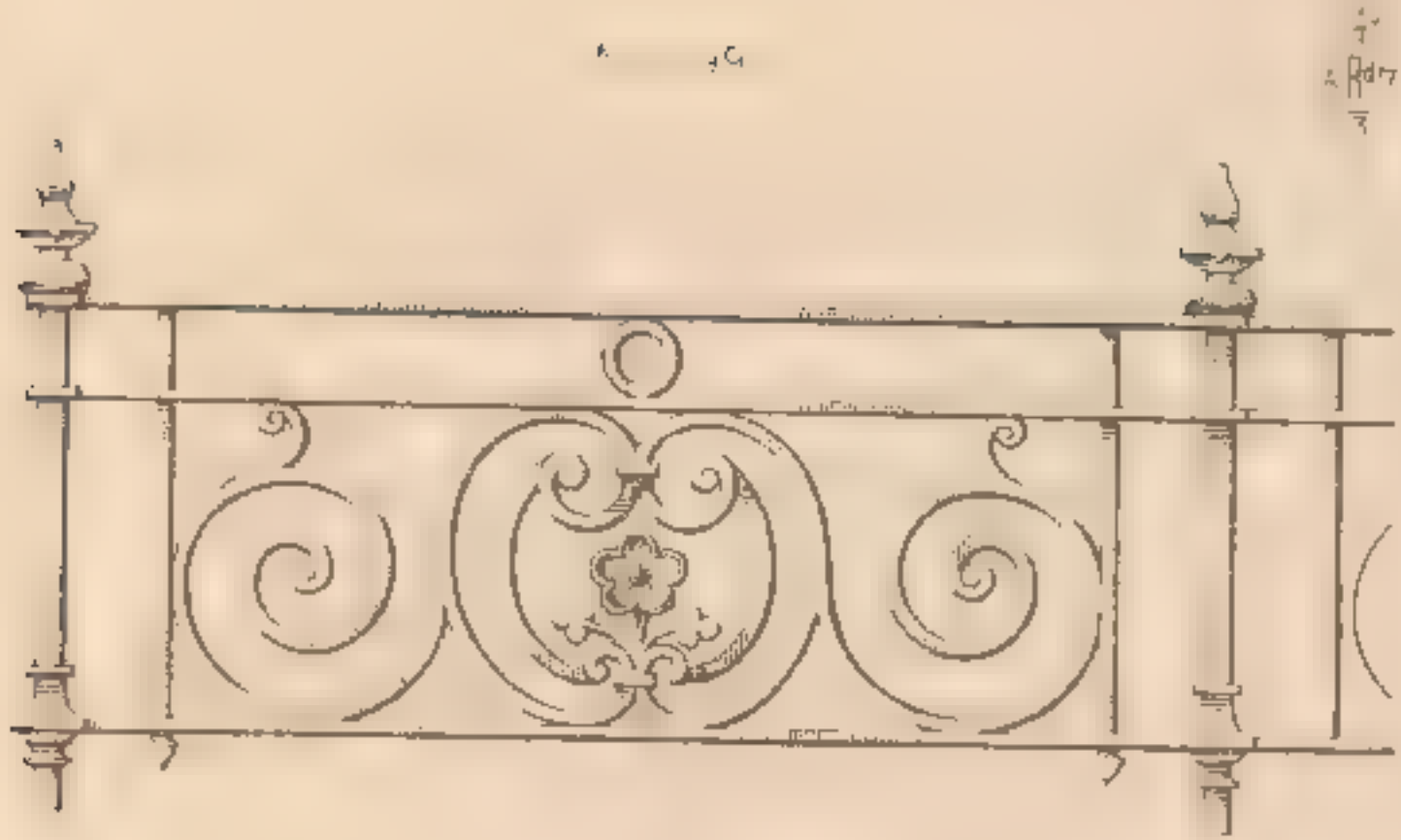


N^o 48

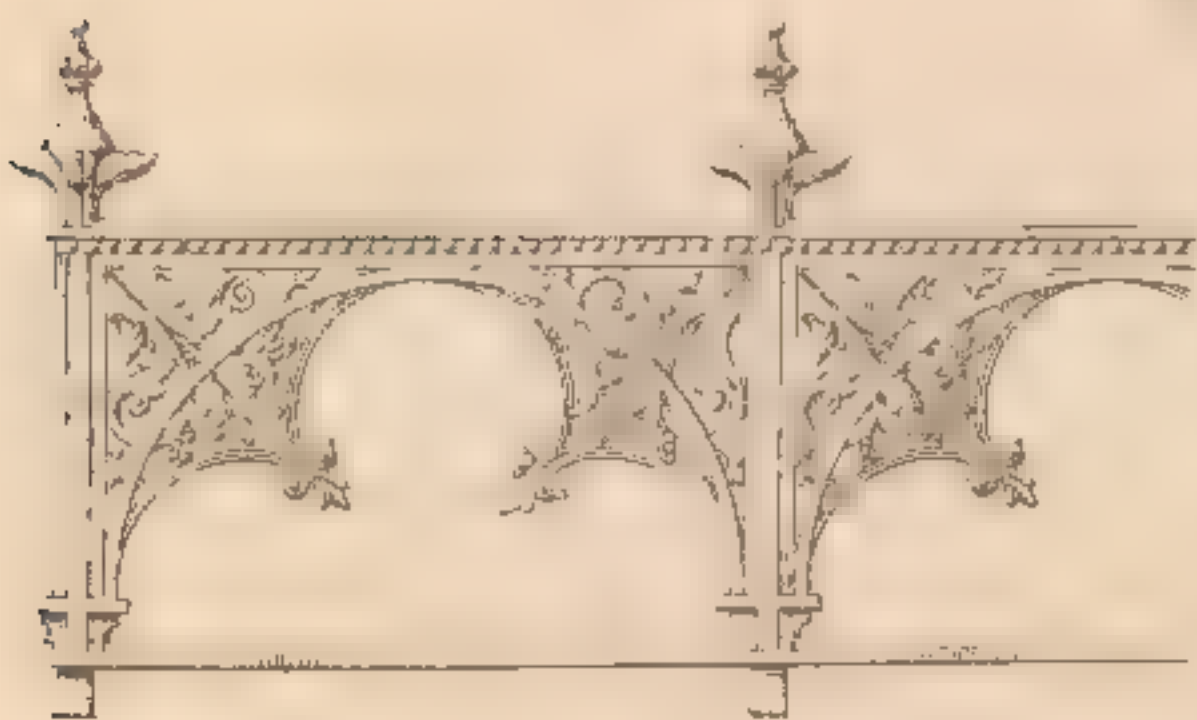
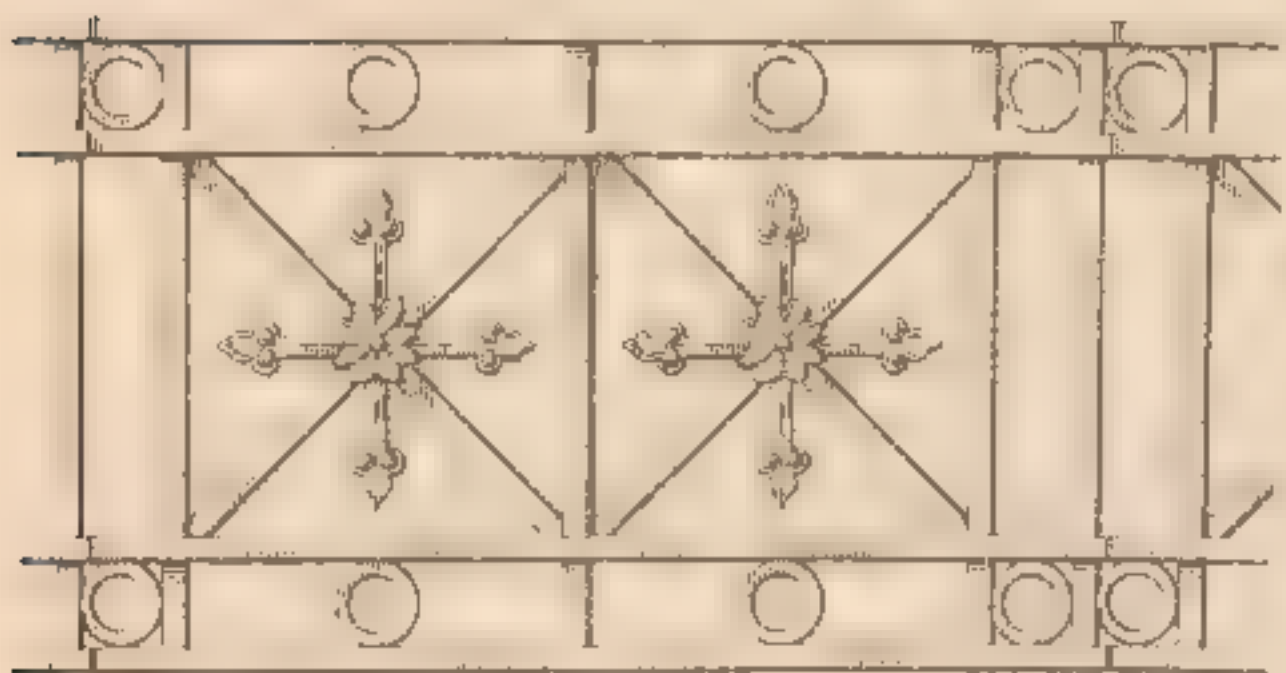
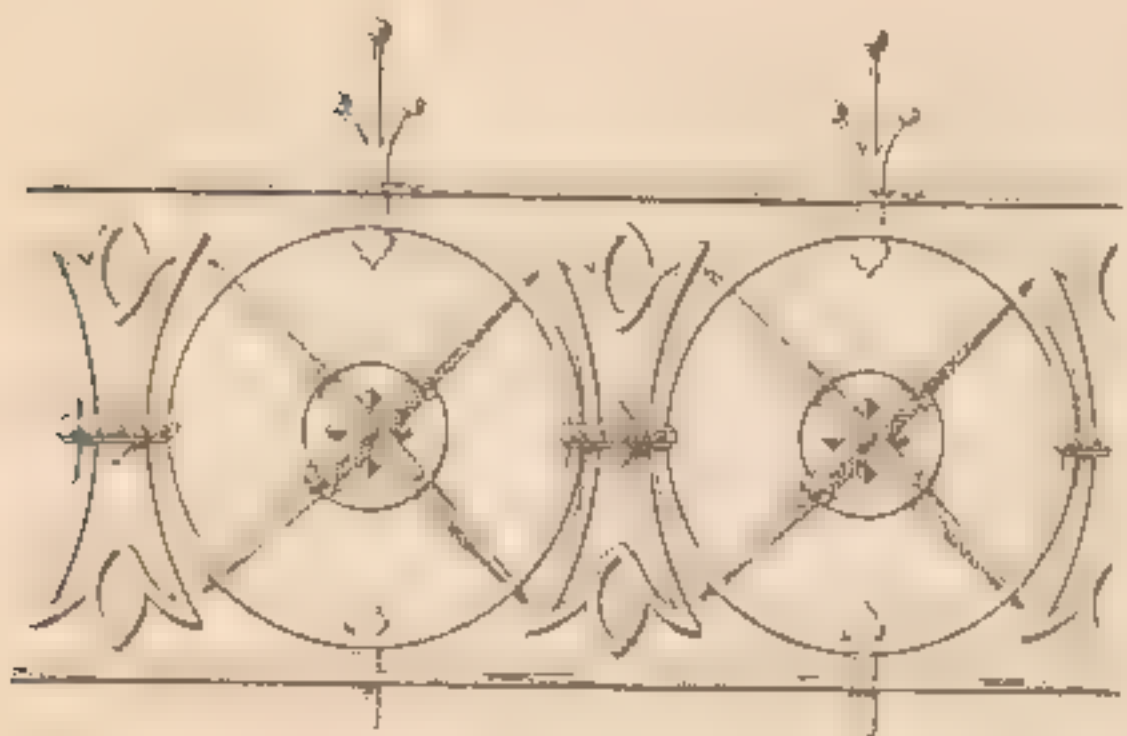


SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING &C



One face

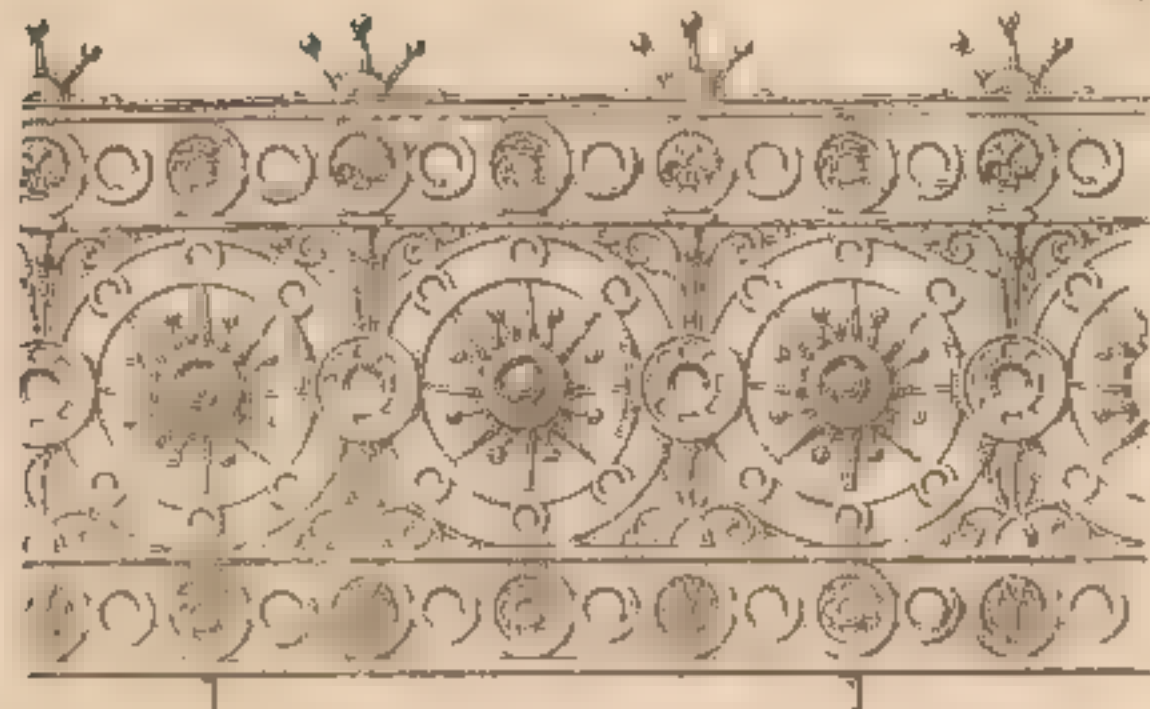
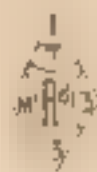


MACFARLANE'S RAILING & C

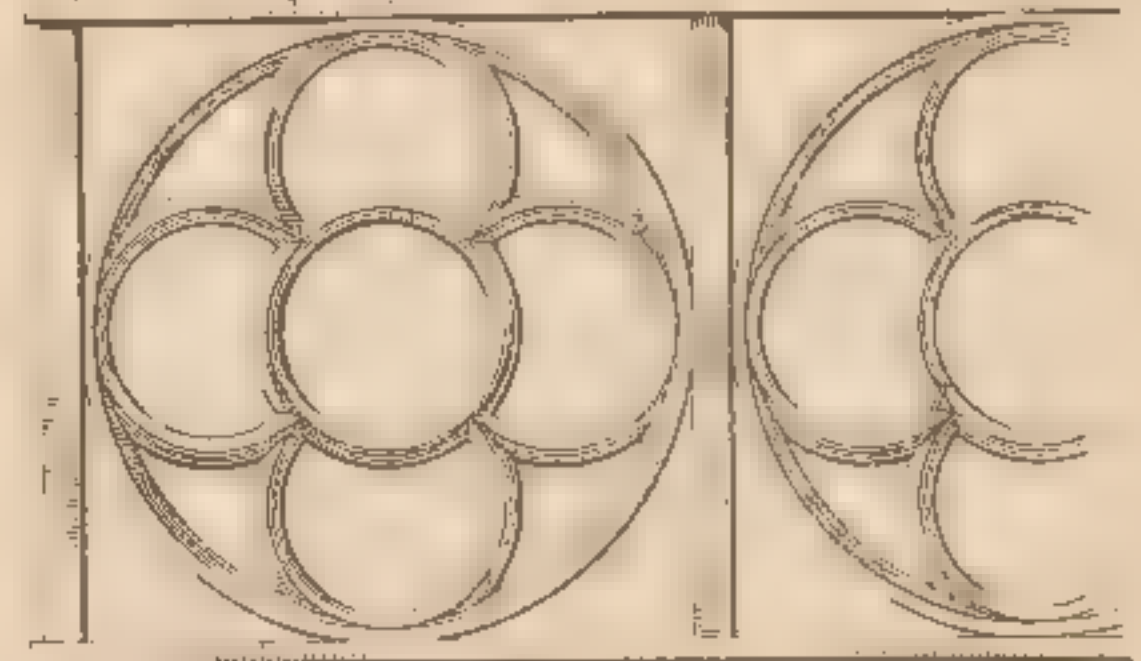
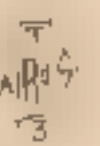
Nº 50



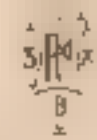
Nº 51



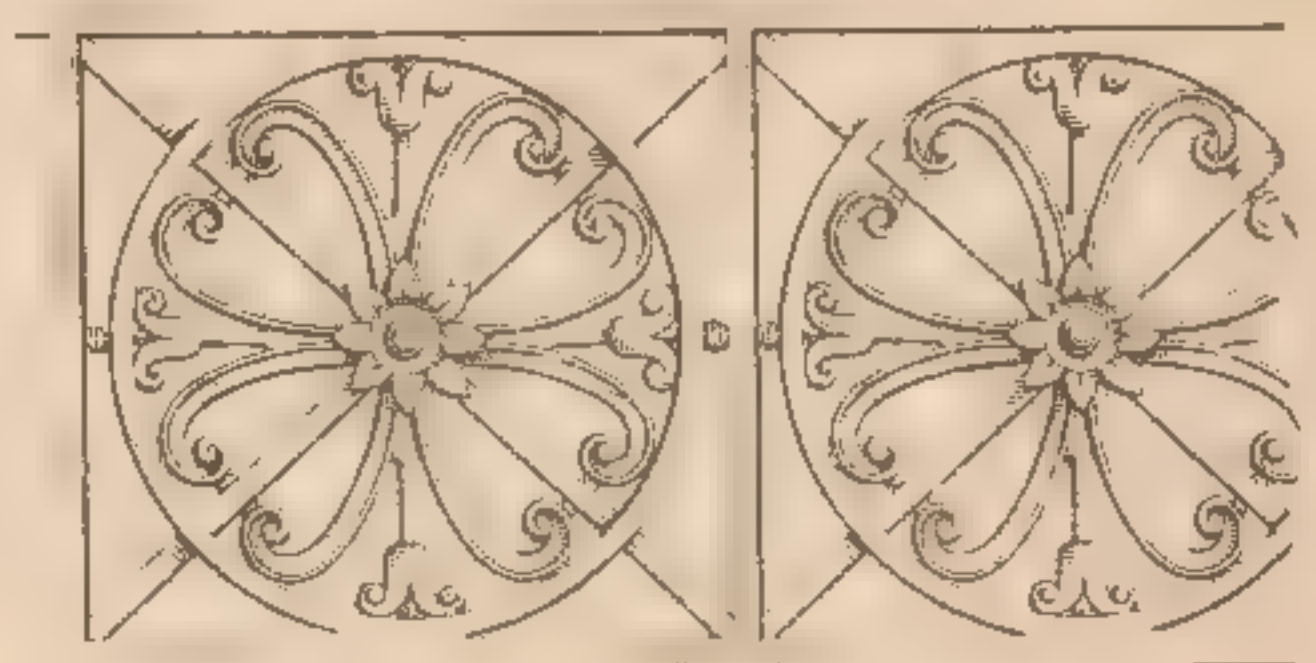
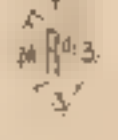
Nº 59



Nº 60



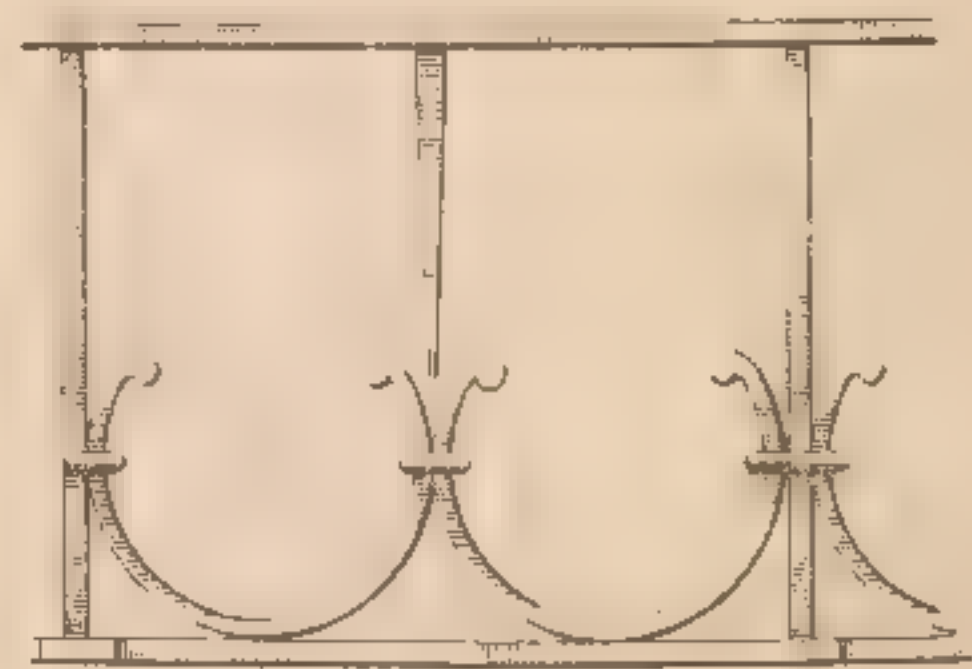
Nº 61



Nº 290



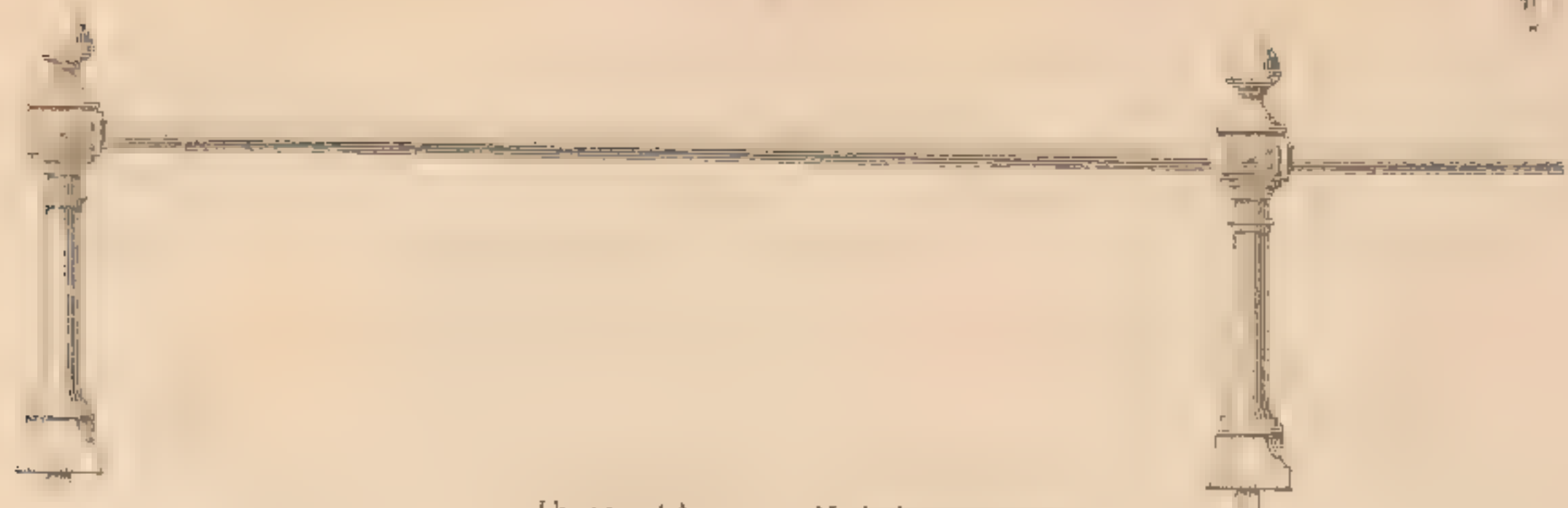
Nº 64



SCALE 1 INCH = 1 FOOT

A. F. F. A. F. F. A. F. F. A. F. F. A. F. F.

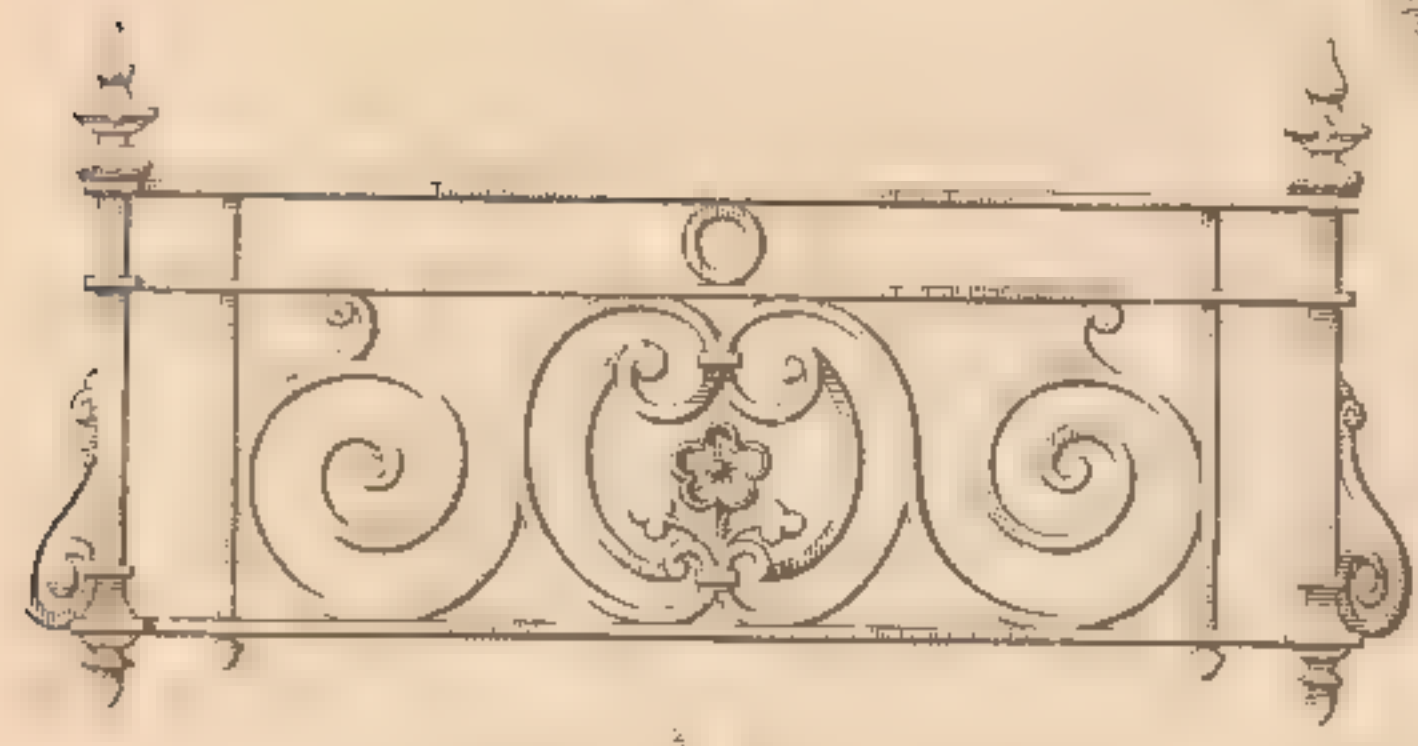
No 47



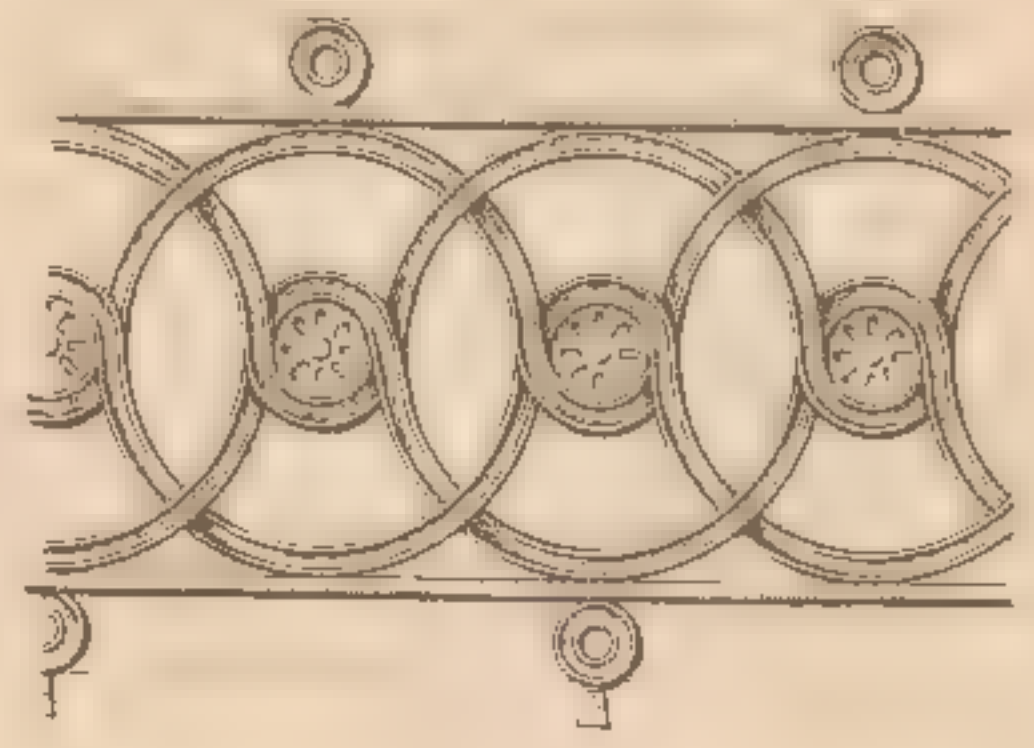
The rail of No 47 is Malacca rent tub

No 44

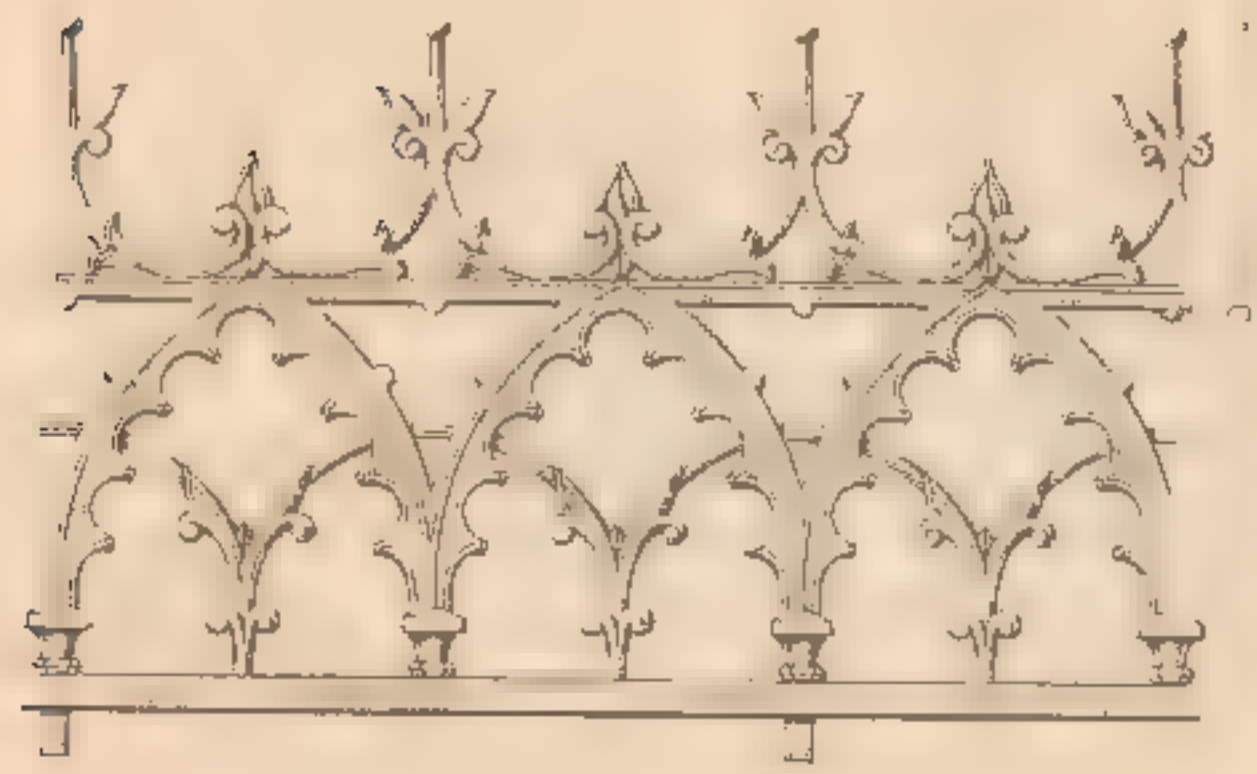
A 11 2/3



No 46

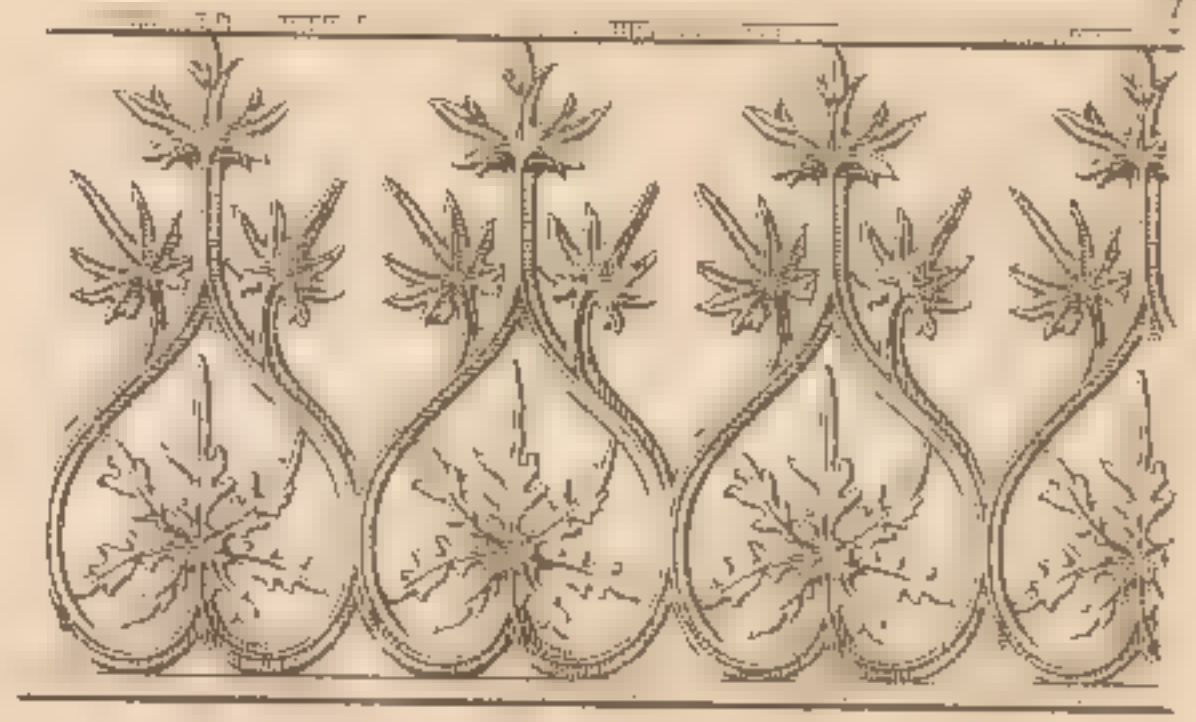


No 52

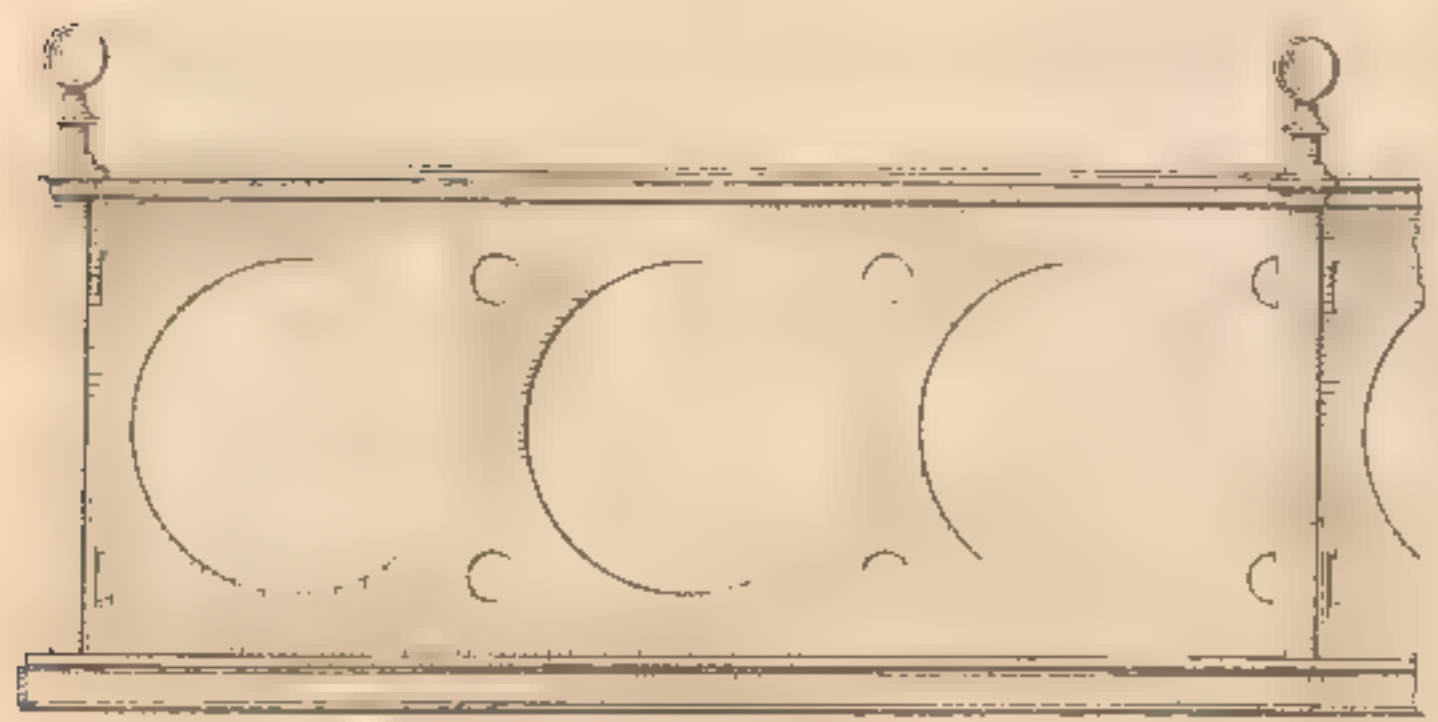


No 55

A 11 2/3

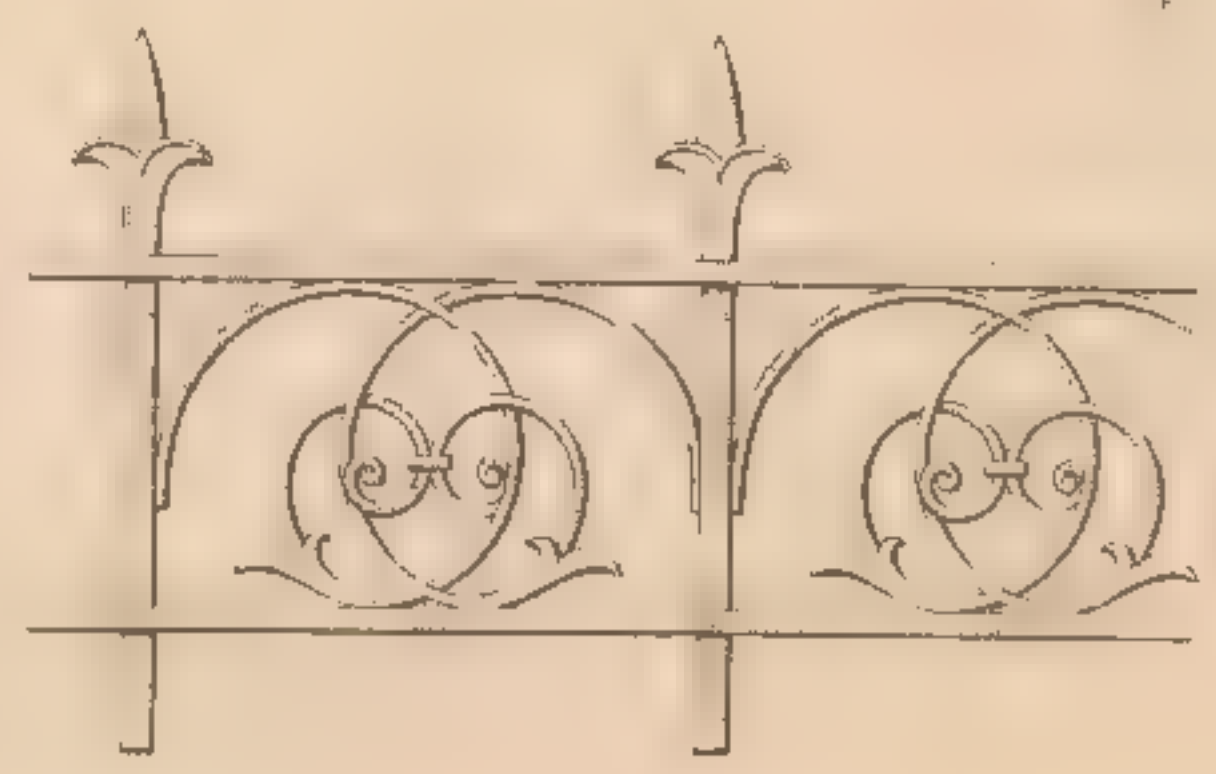


No 58



No 60

A 11 2/3



SCALE INCH = 1 FOOT



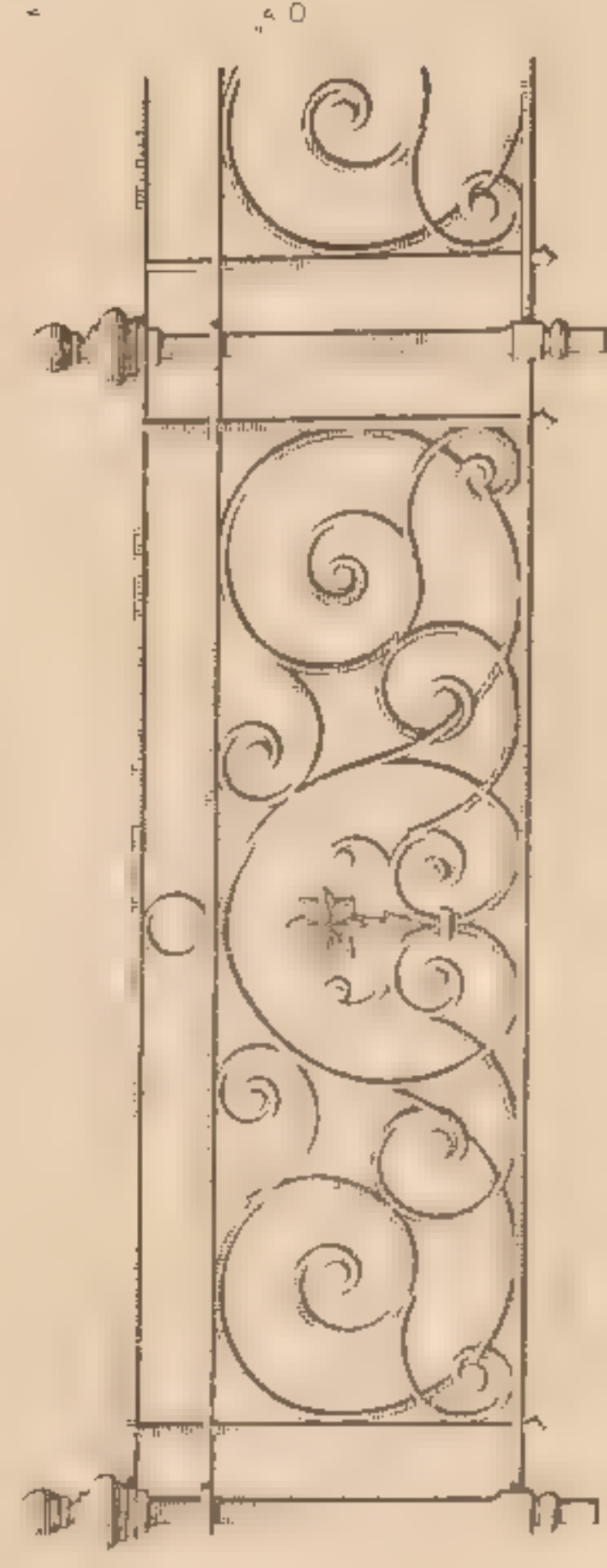
N° 28



N° 283



N° 284 4 2 1/2" between centers



N° 285



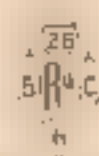
N° 287

MACFARLANE'S RAILING &C

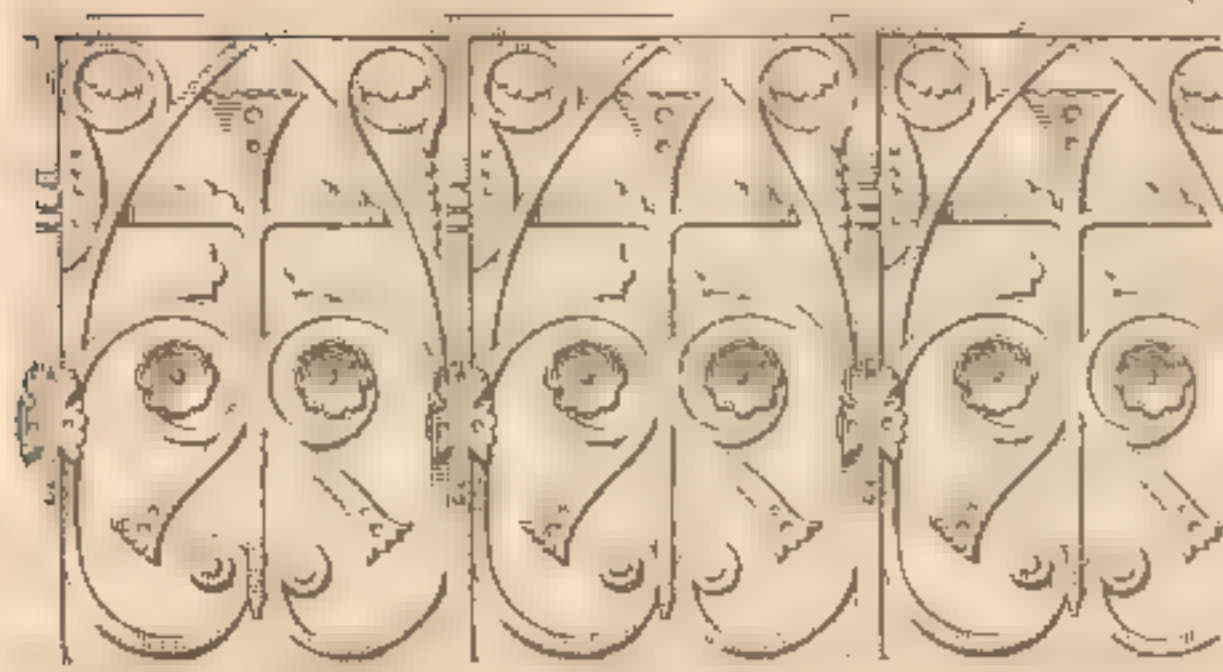
No 26. 4' 2 1/2" between centres.



No 72

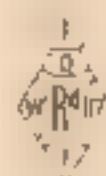


No 3



On face

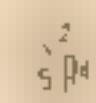
No 57



No 36



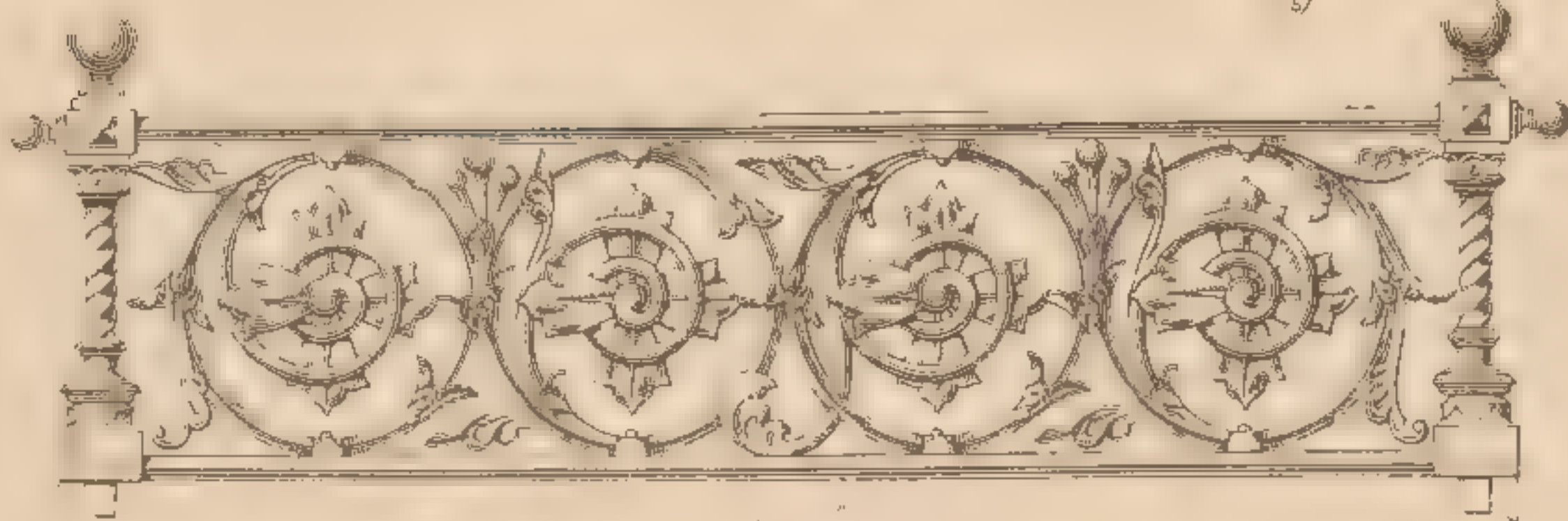
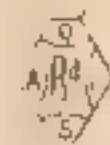
No 26 7' 9" between centres.



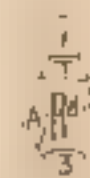
SCALE 1 INCH = 1 FOOT

MALFARLANE'S RAILING &c

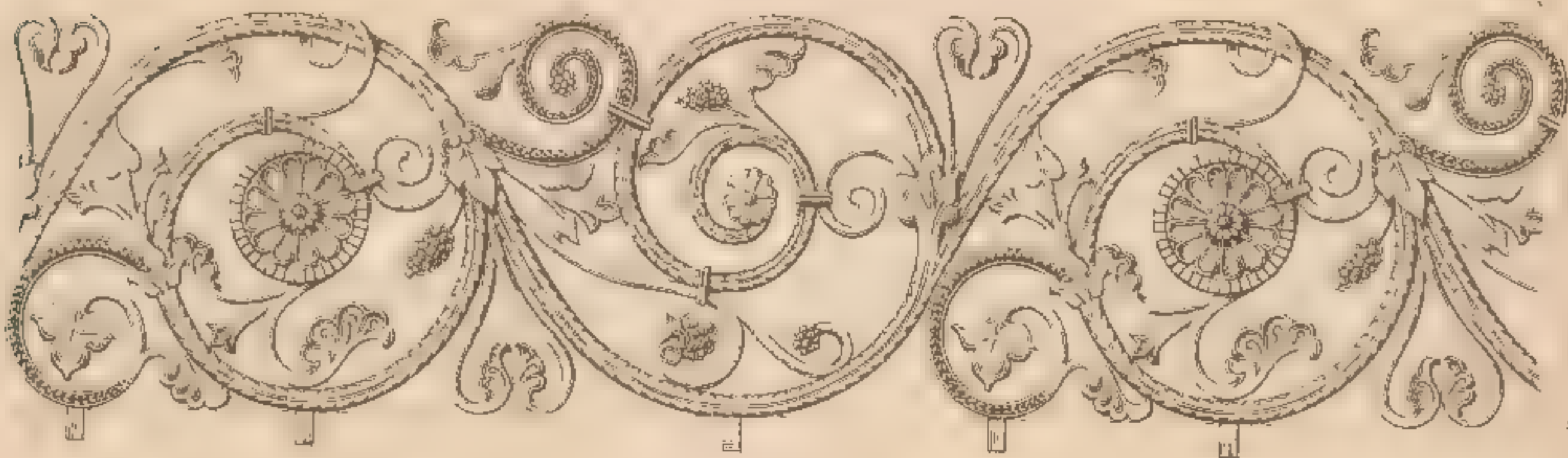
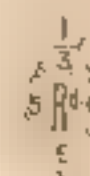
Nº 63



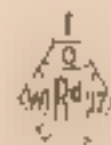
Nº 21



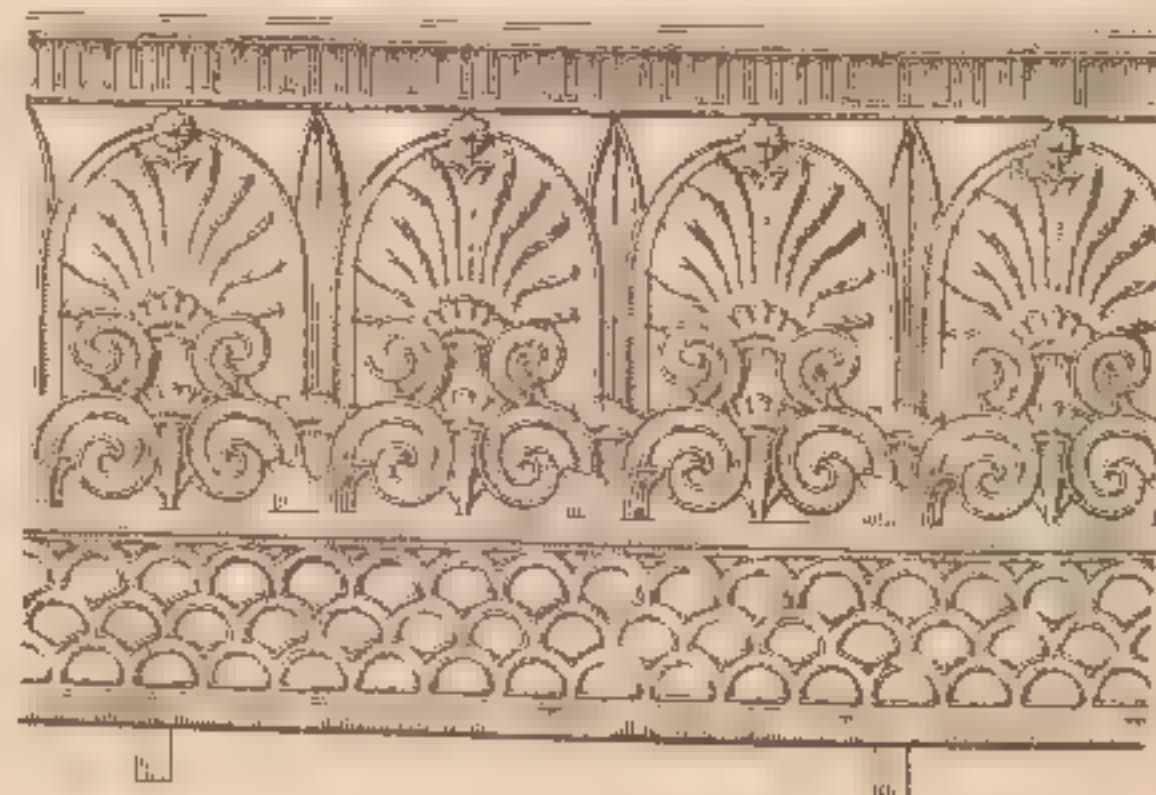
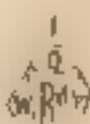
Nº 55



Nº 49



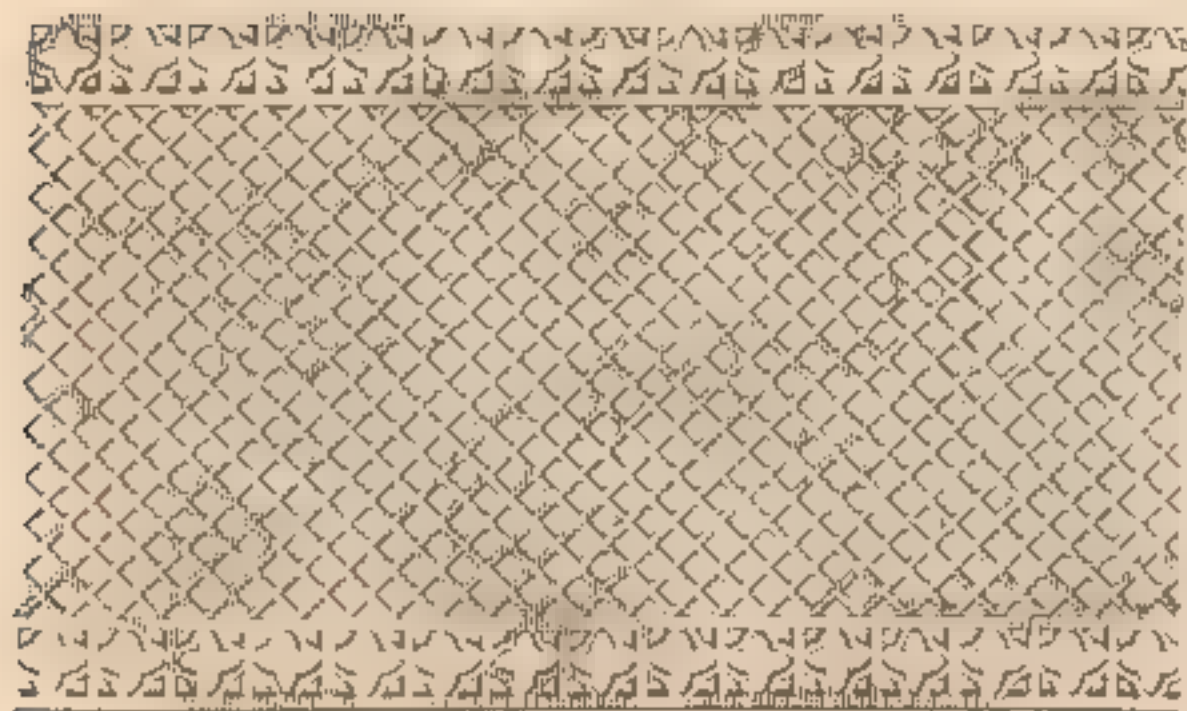
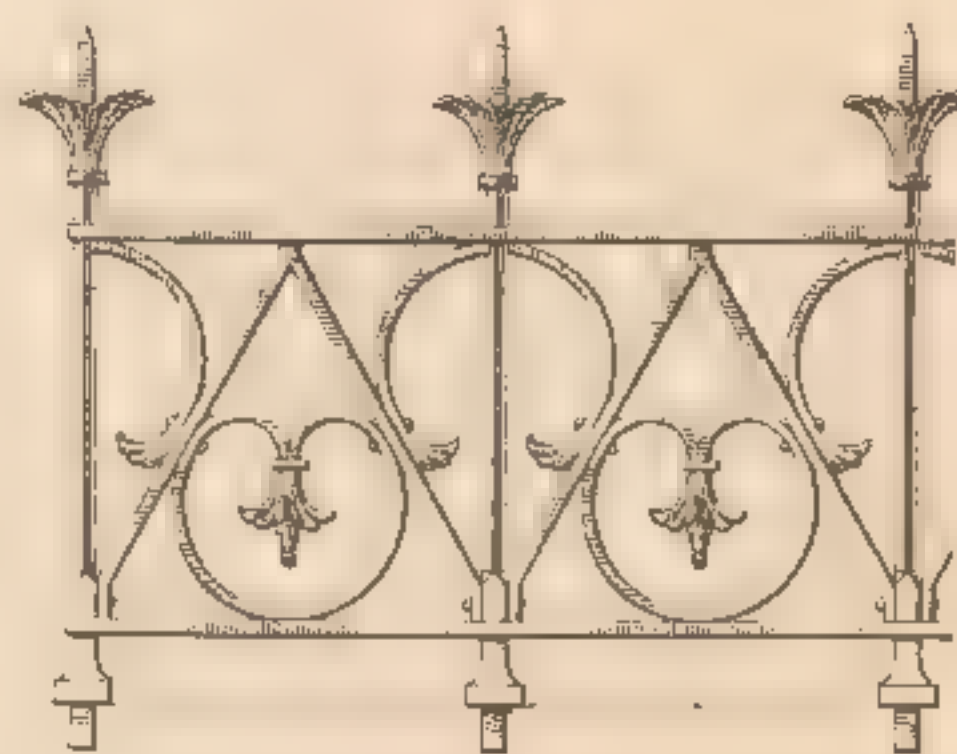
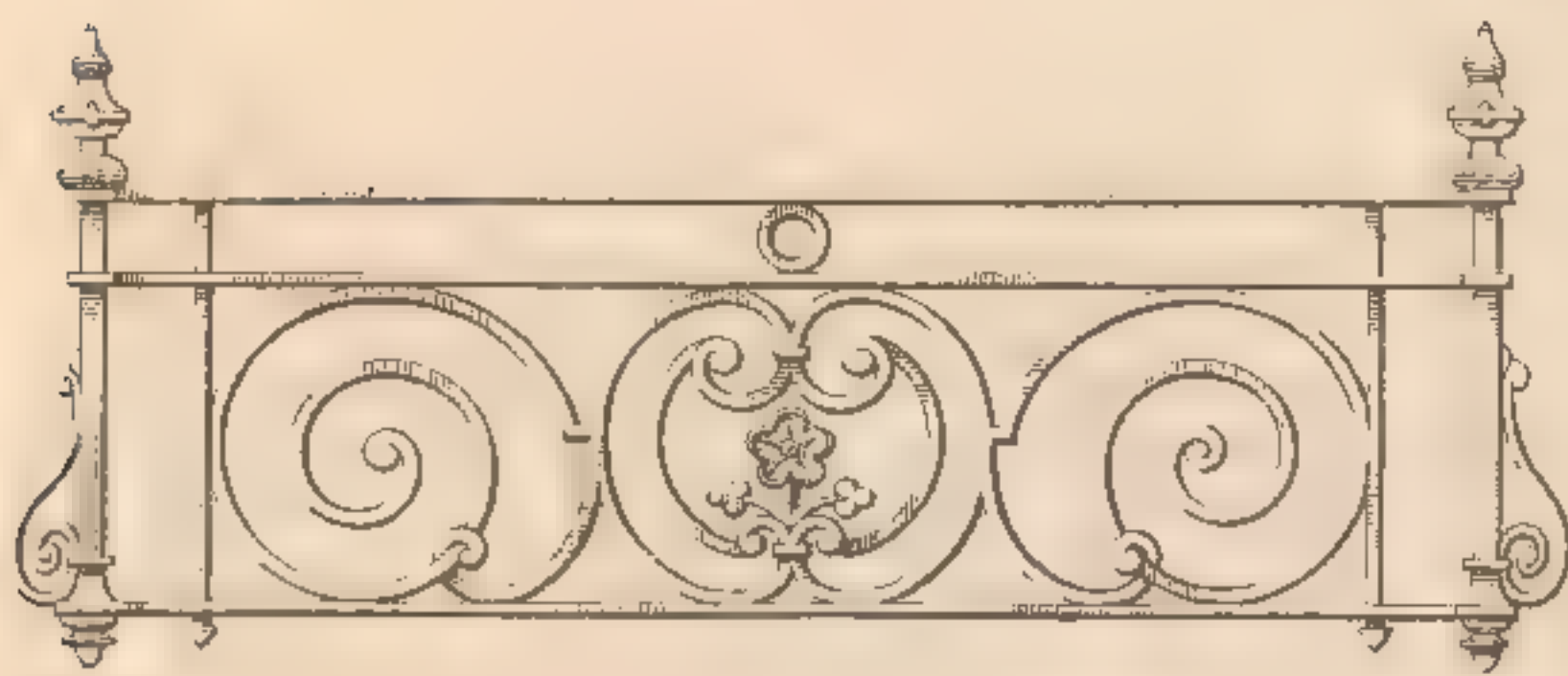
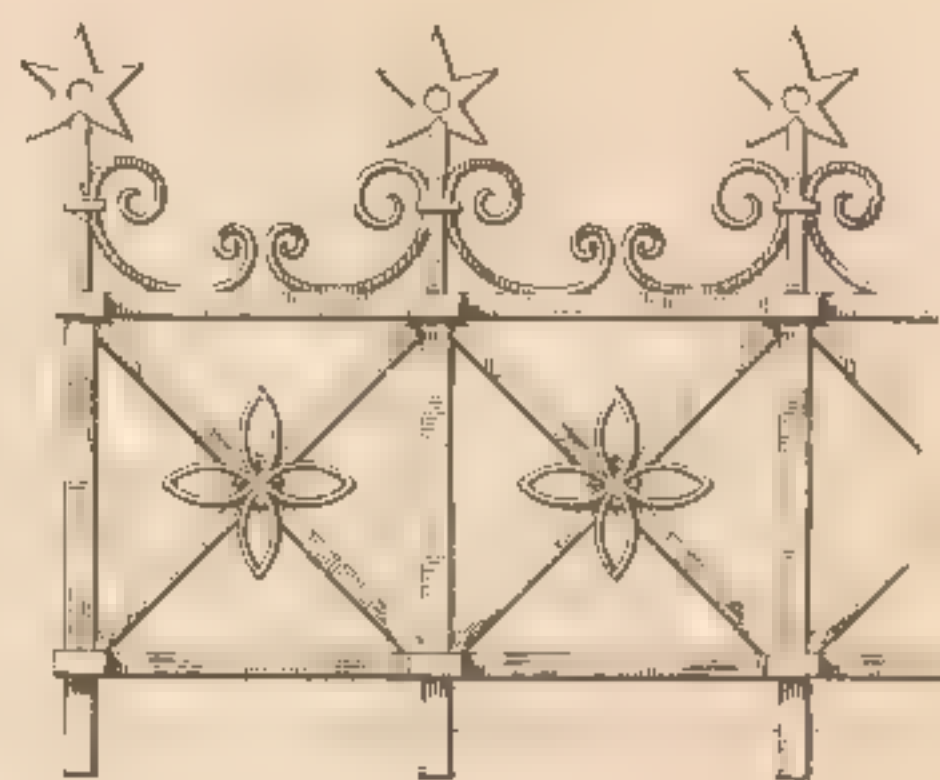
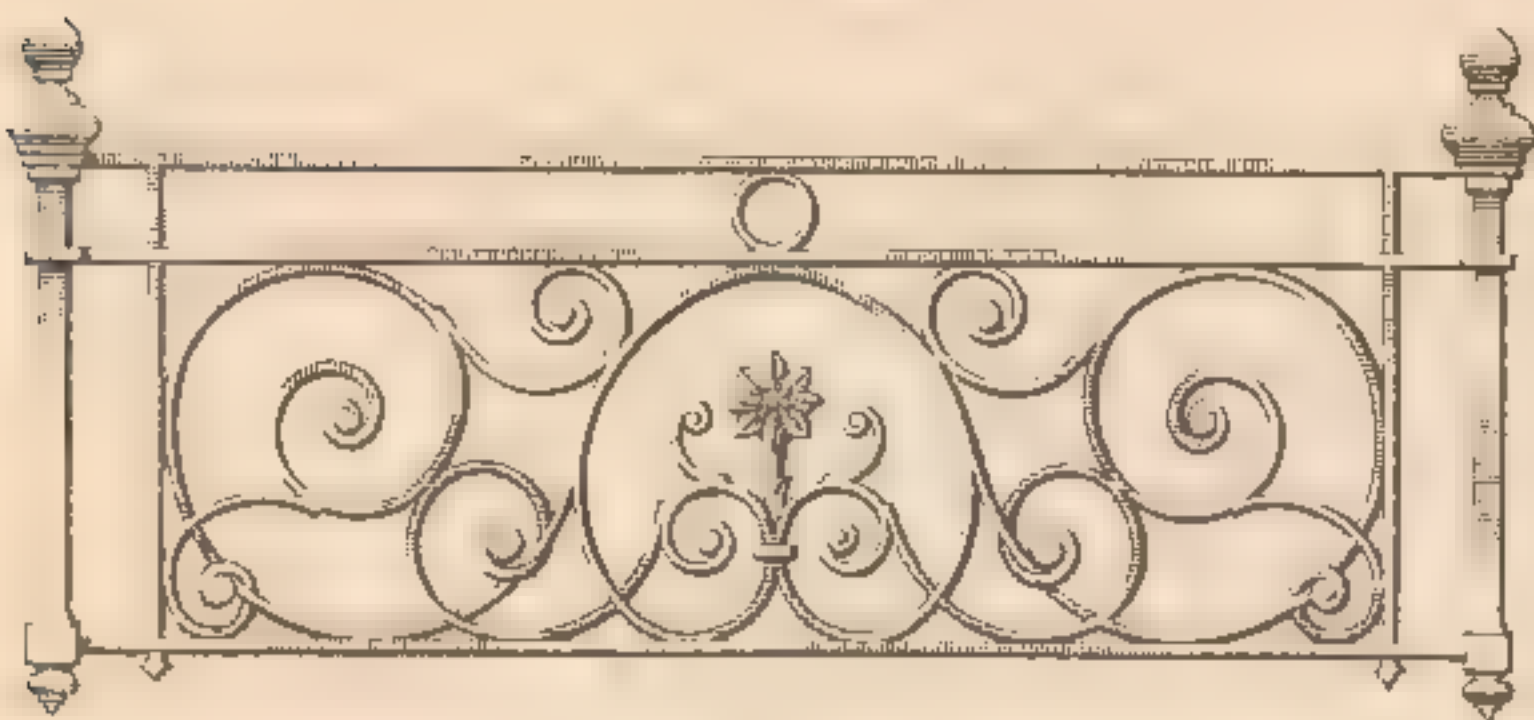
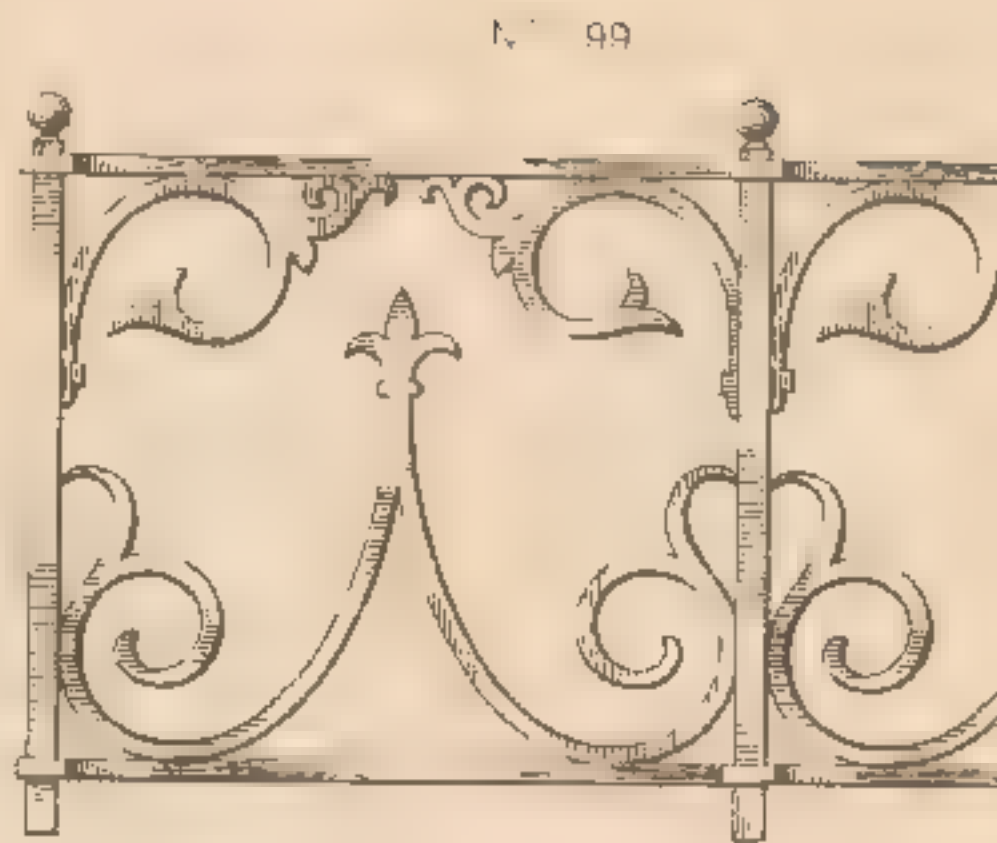
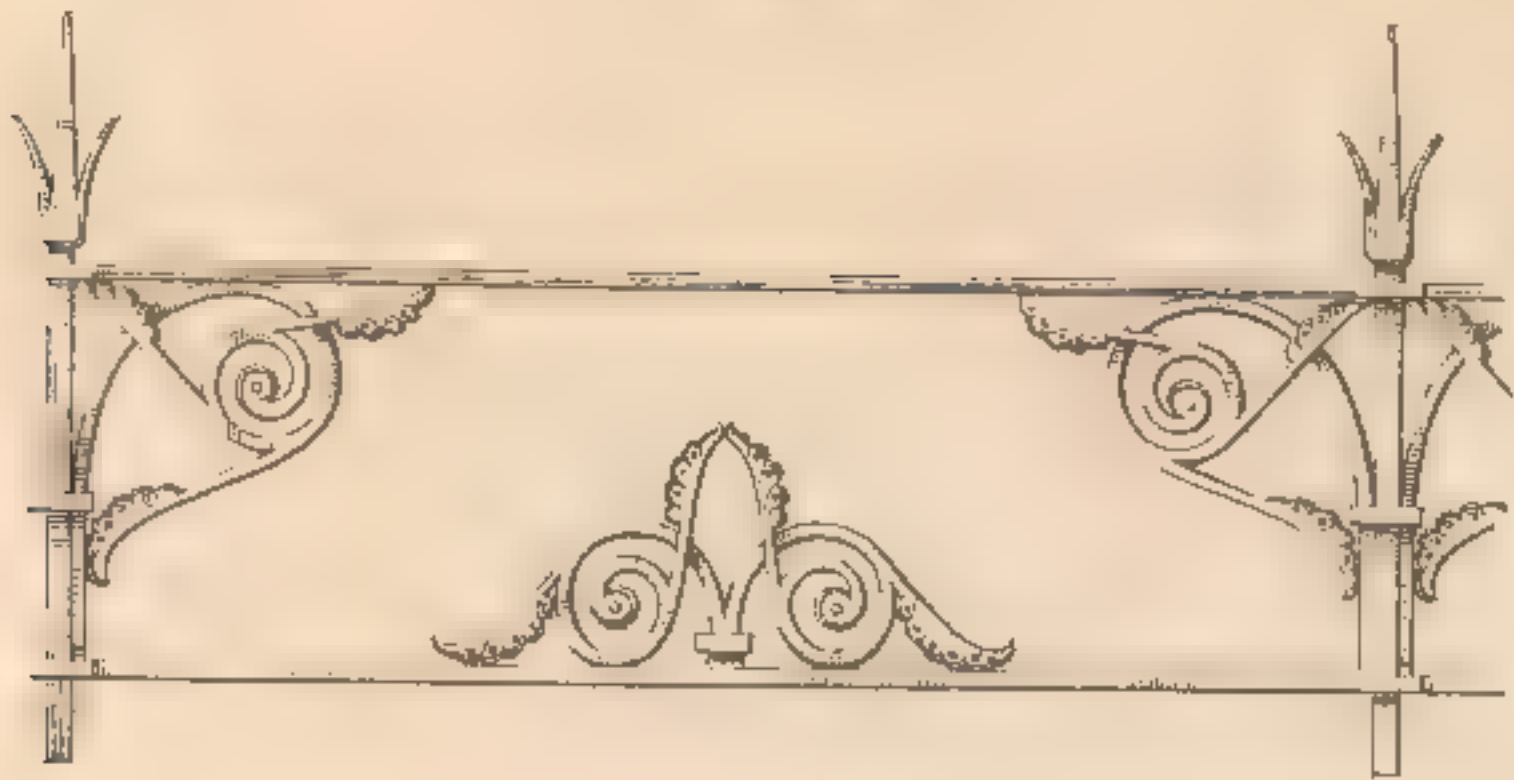
Nº 57 with angled loose



M

F

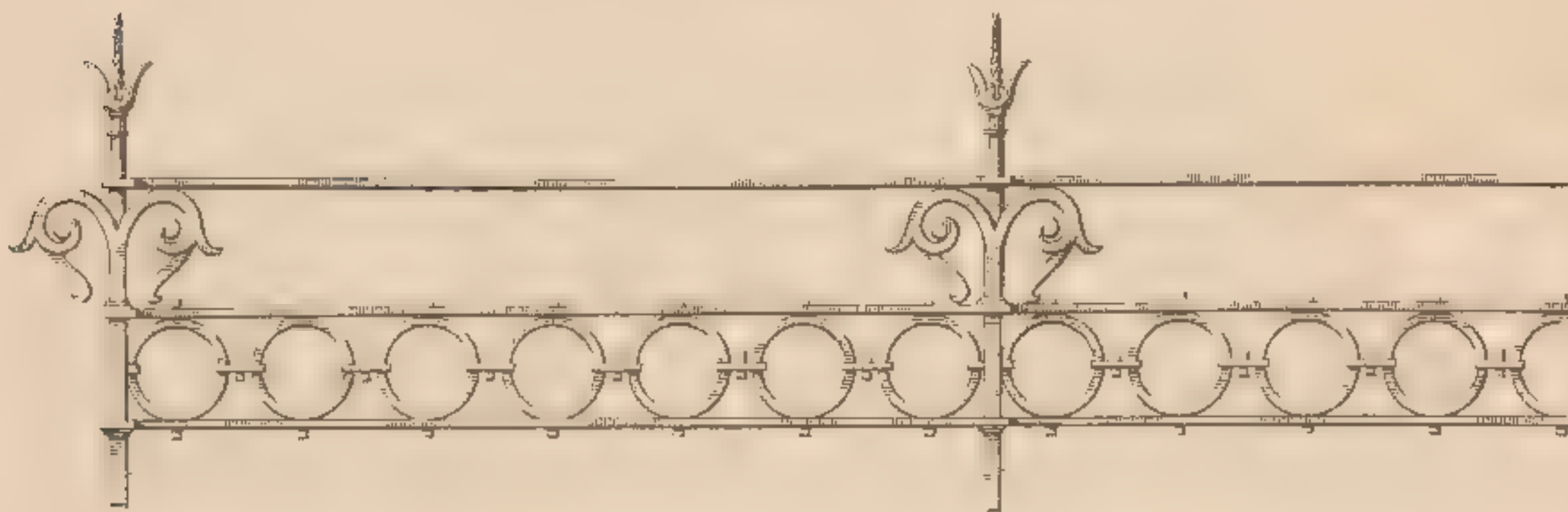
MACFARLANE'S RAILING & CO



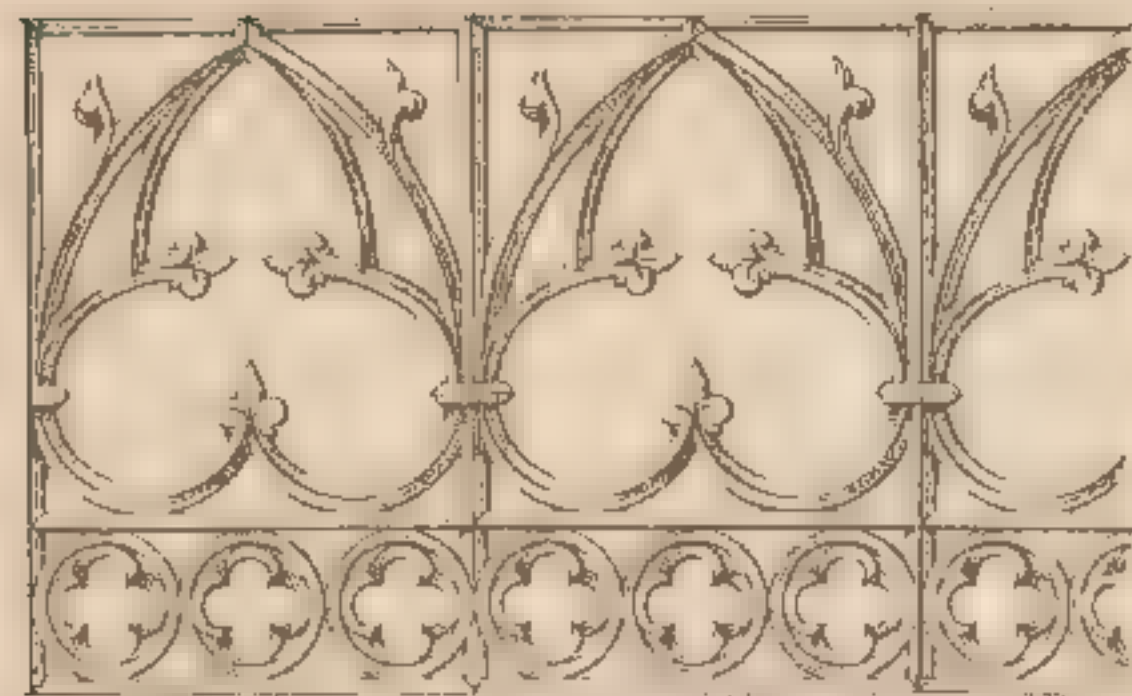
SCALE 1/4" = 1'

MACFARLANE'S RAILINGS &

No 206



No 4



No 23



No 5



No 47



No 53



F. & T.

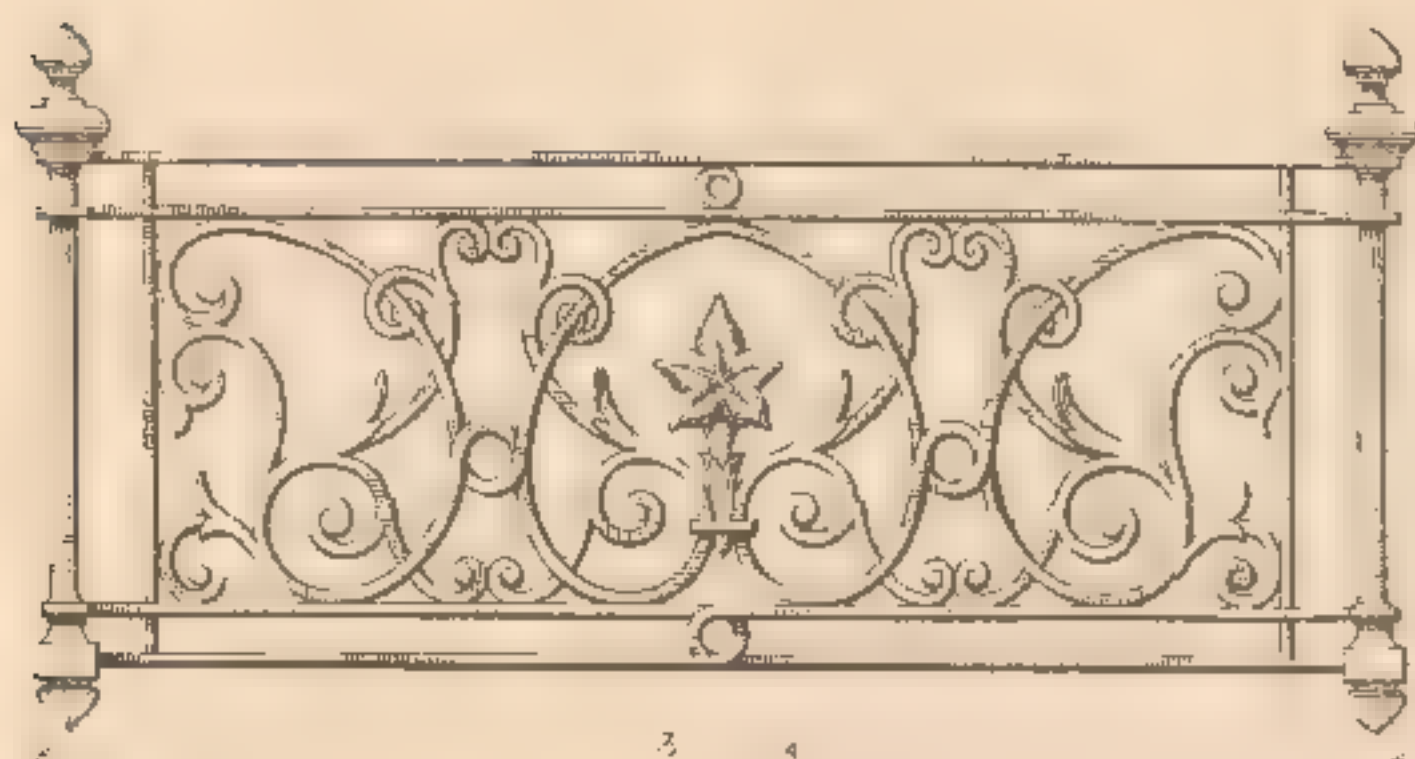
MACFARLANE'S RAILING &

Nº 6

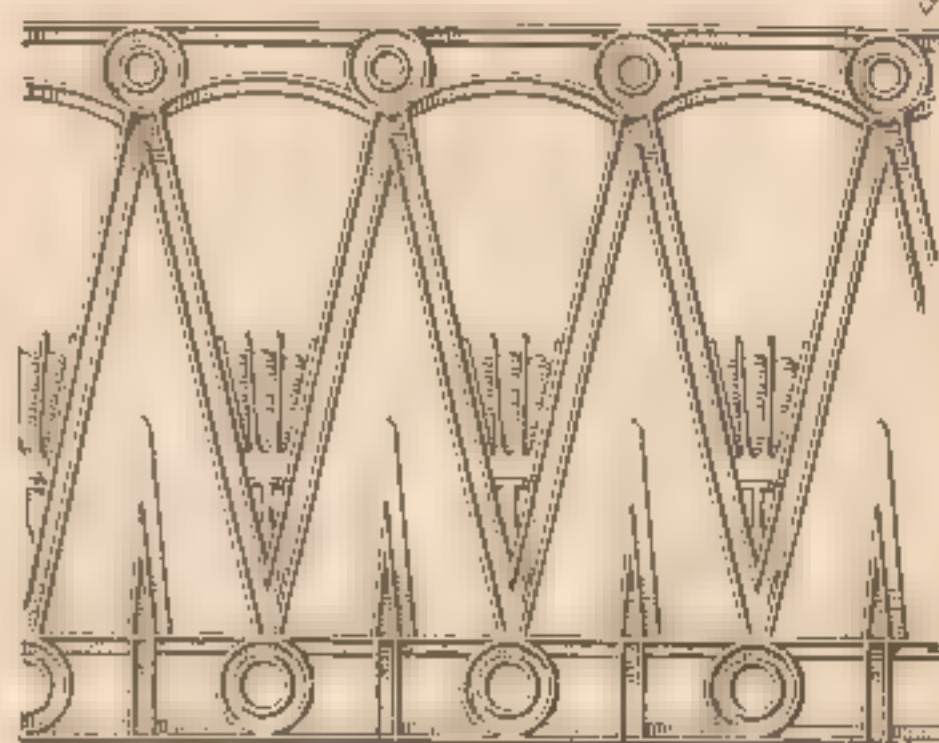
APR 1875



Nº 28



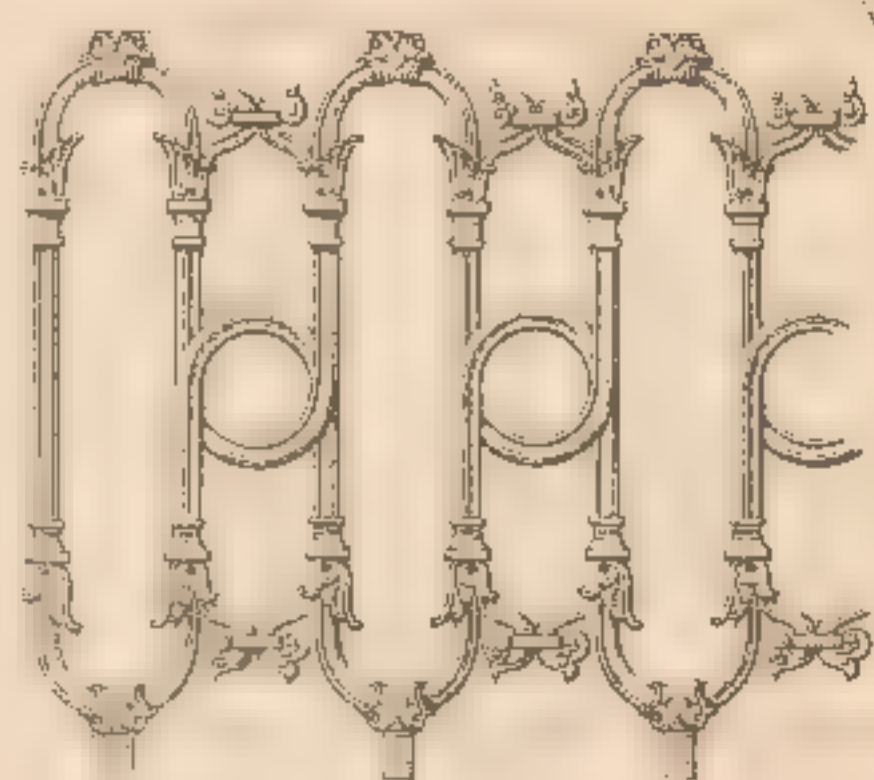
Nº



Nº 28



Nº 466



Nº 232



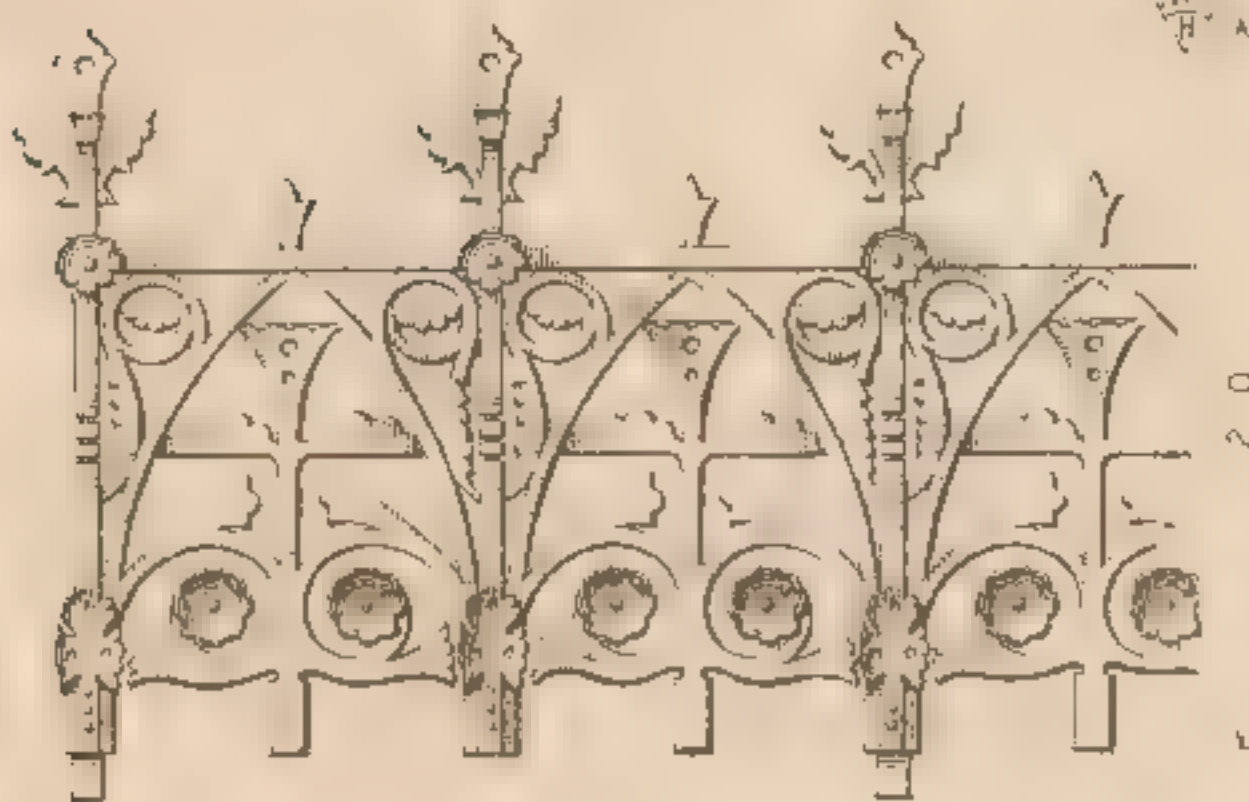
SCALE 1 INCH = FOOT

MACFARLANE'S RAILING &C

No 53



No 72



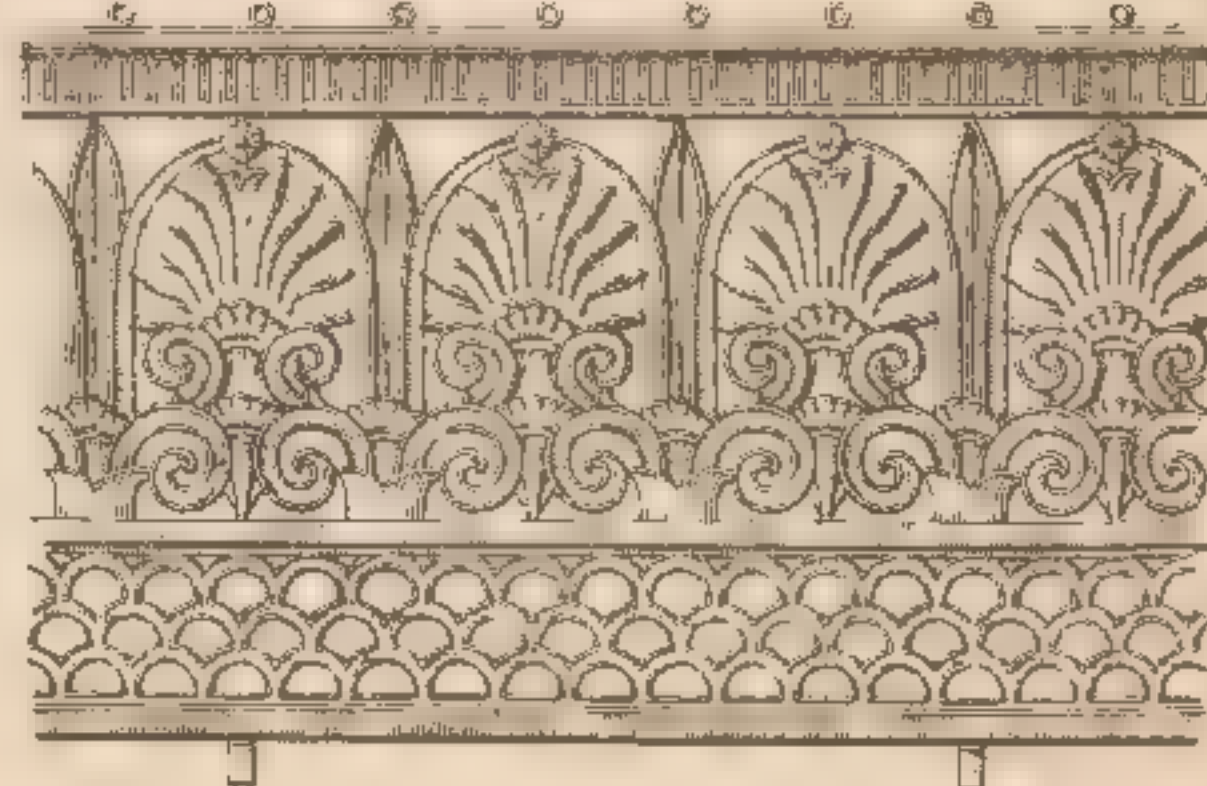
No 56



No 220



No 57 at No 58 Landrail 1st



No 55



SCALE INCH = 1 FOOT

MACFARLANE'S RAILING & CO

Nº 43



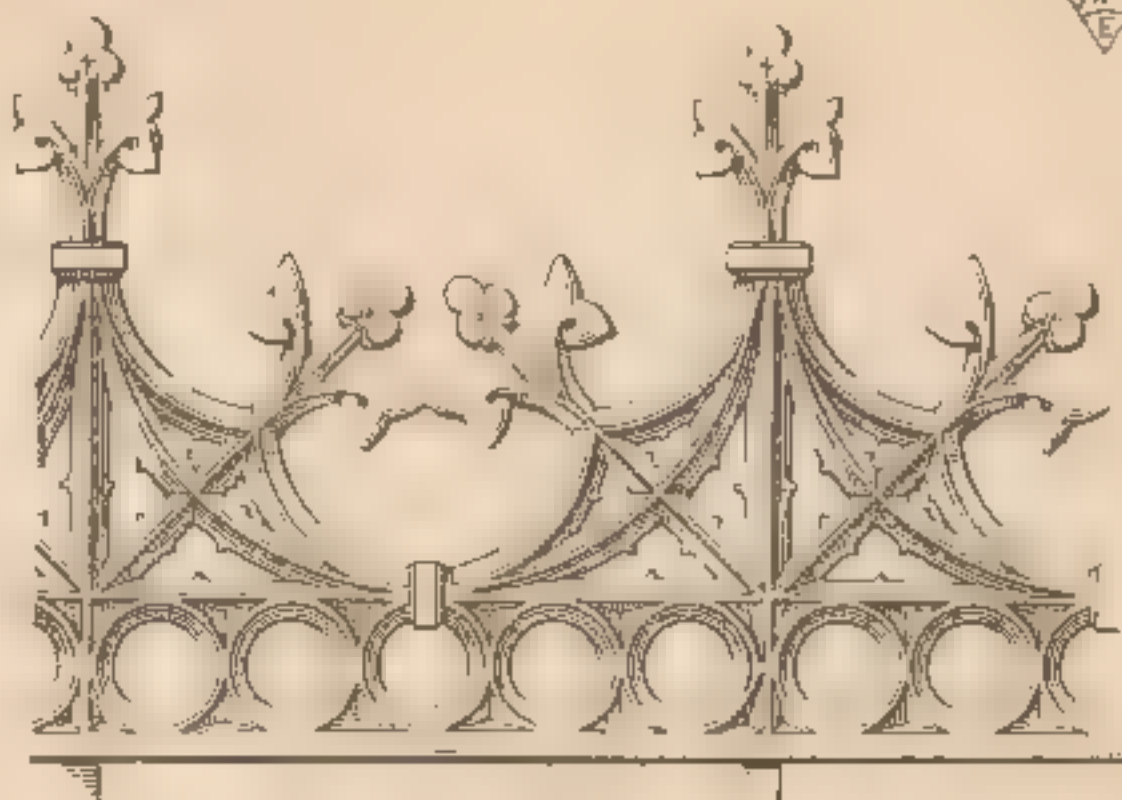
Nº 4



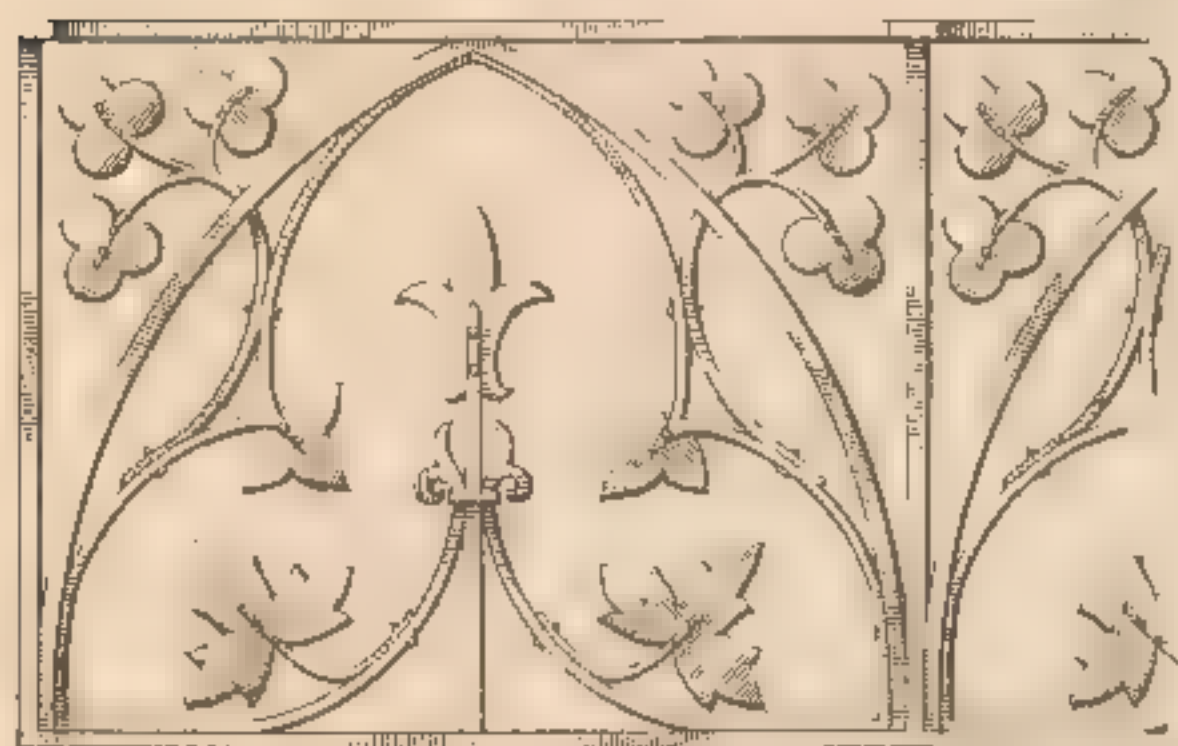
Nº 65



Nº 7



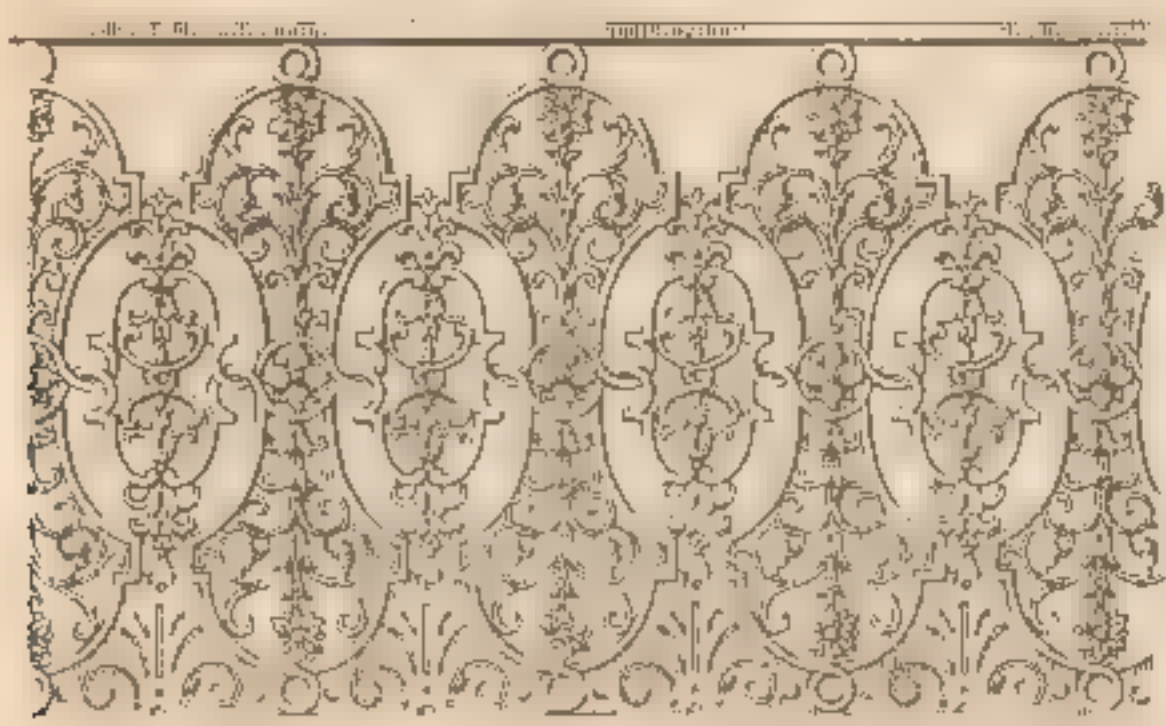
Nº 6



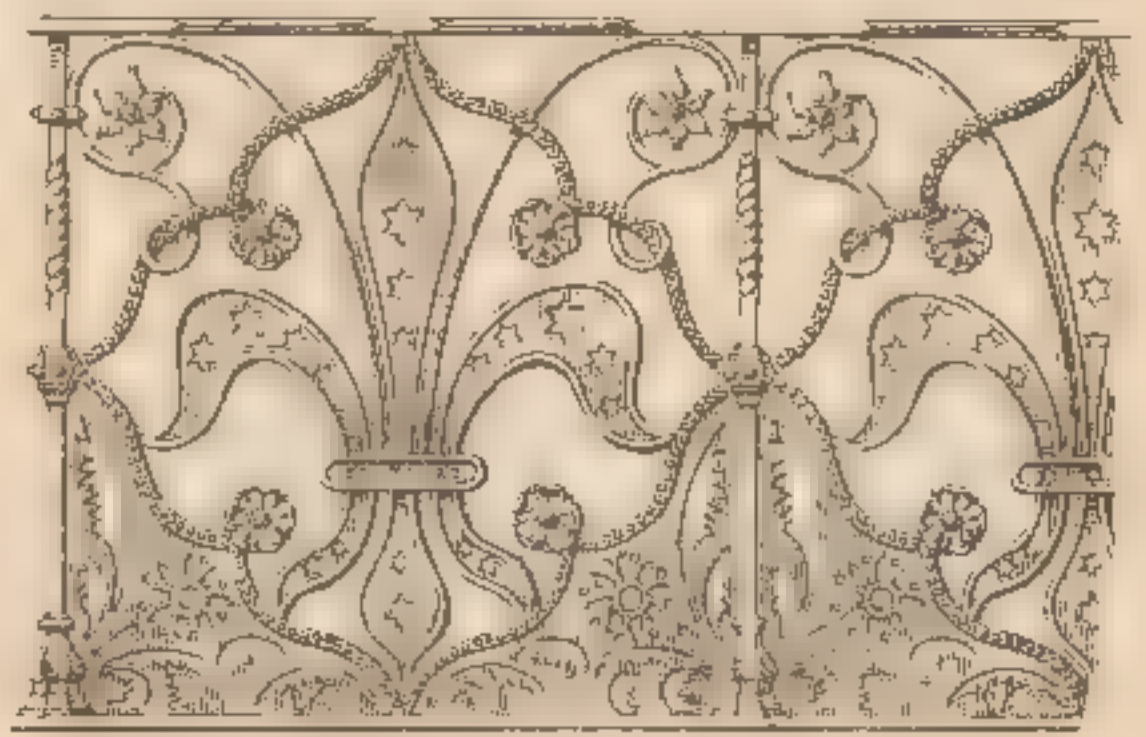
Nº 42



Nº 46



Nº 4



One face

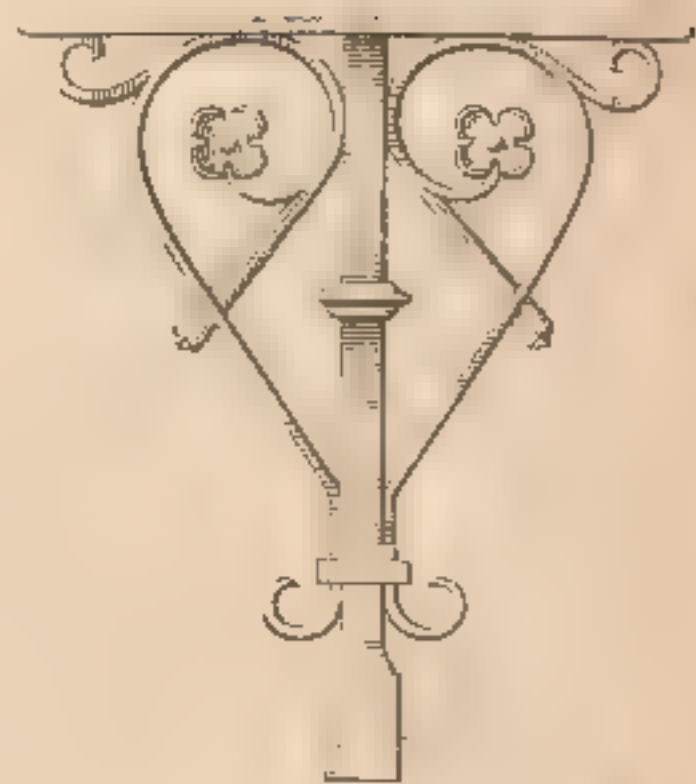
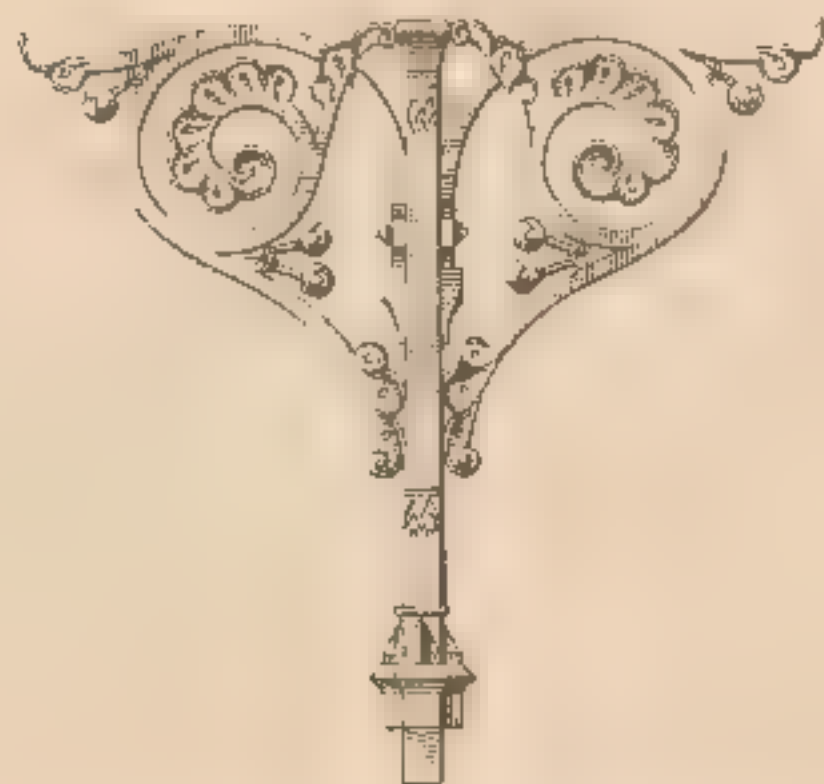
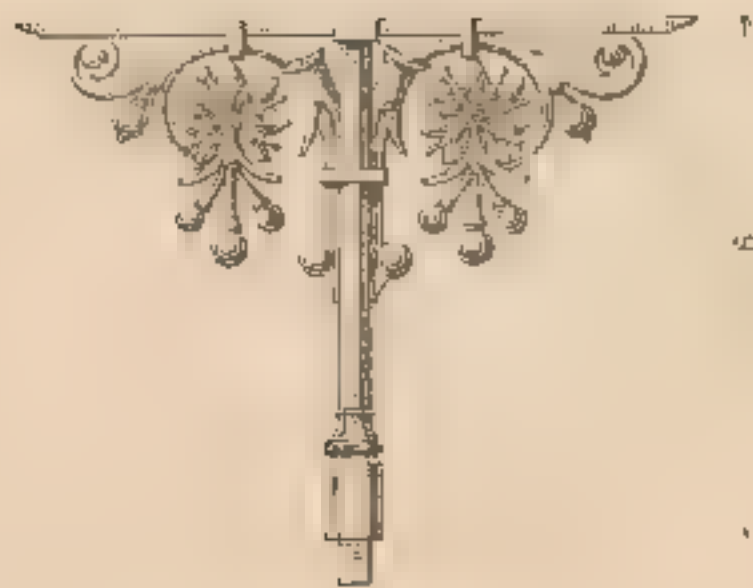
SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING &c

Nº 202

Nº 338

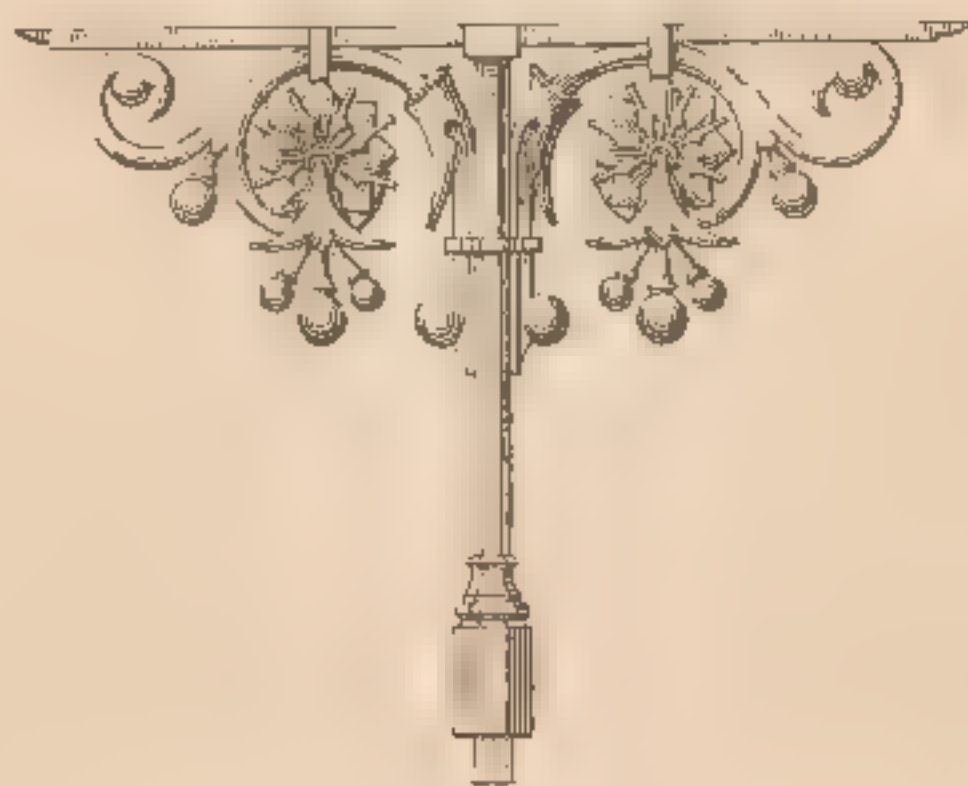
Nº 50



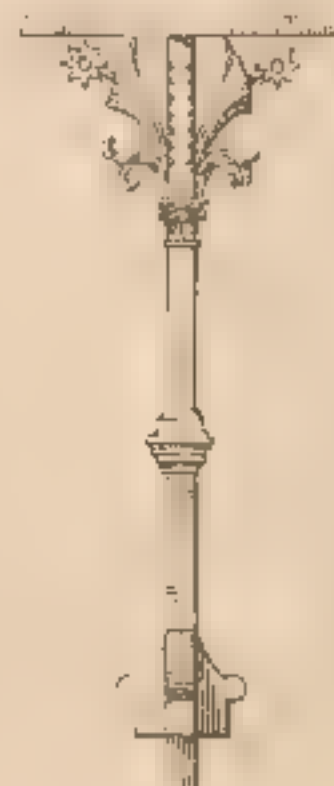
Nº 360



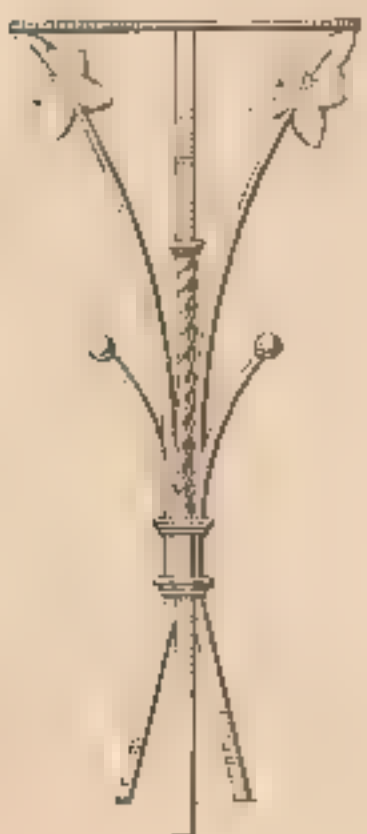
Nº 50



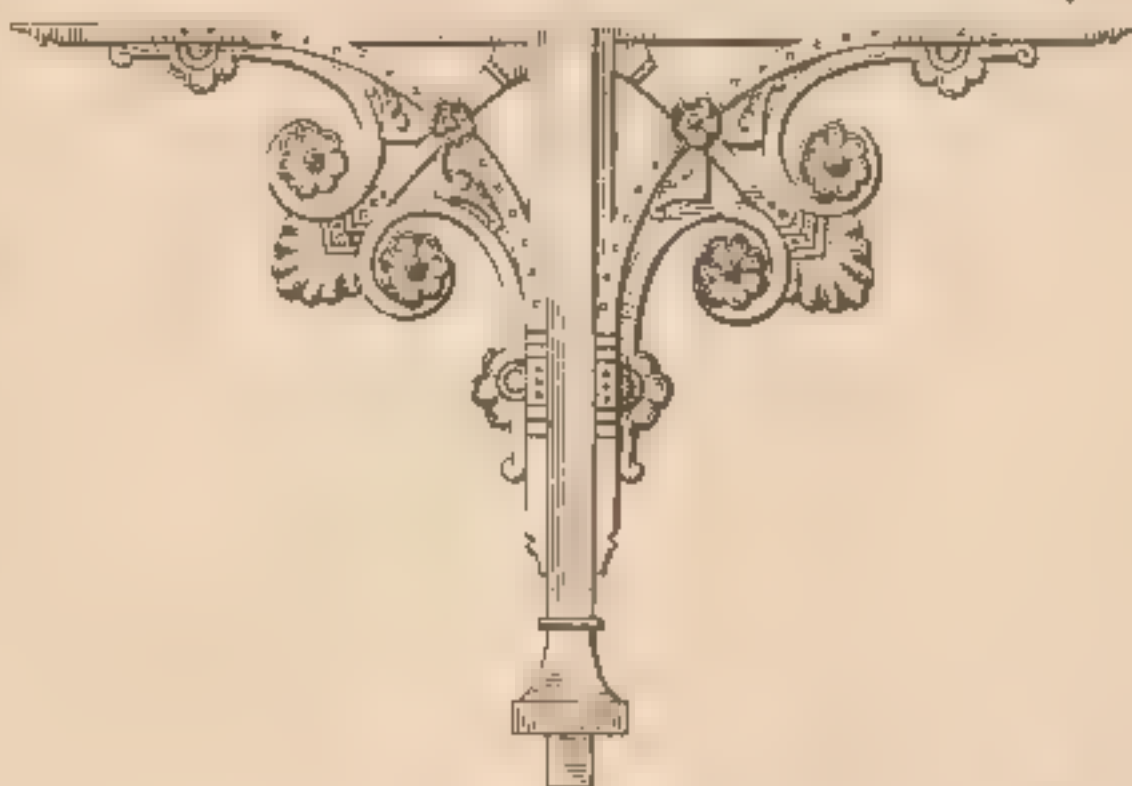
Nº 04



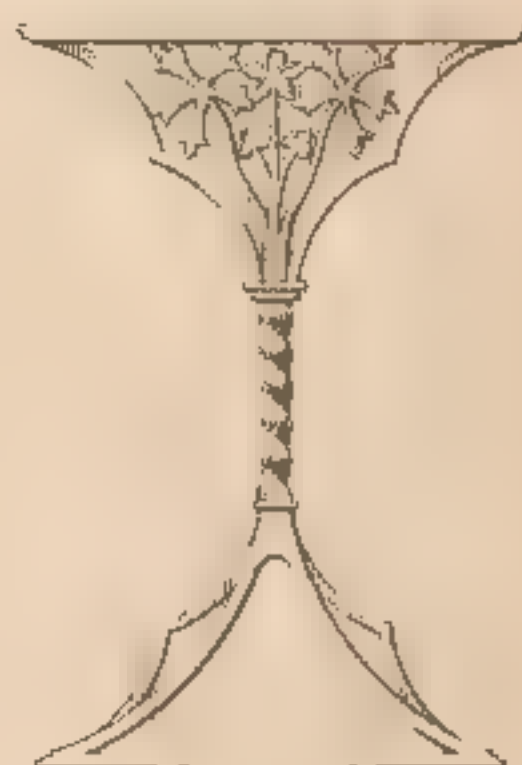
Nº 251



Nº 62



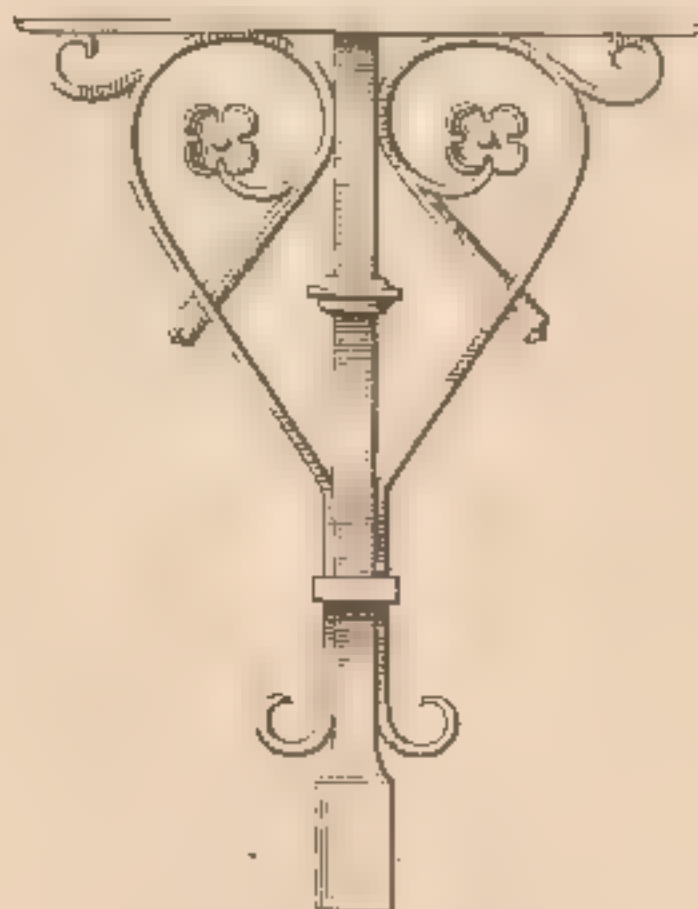
Nº 22



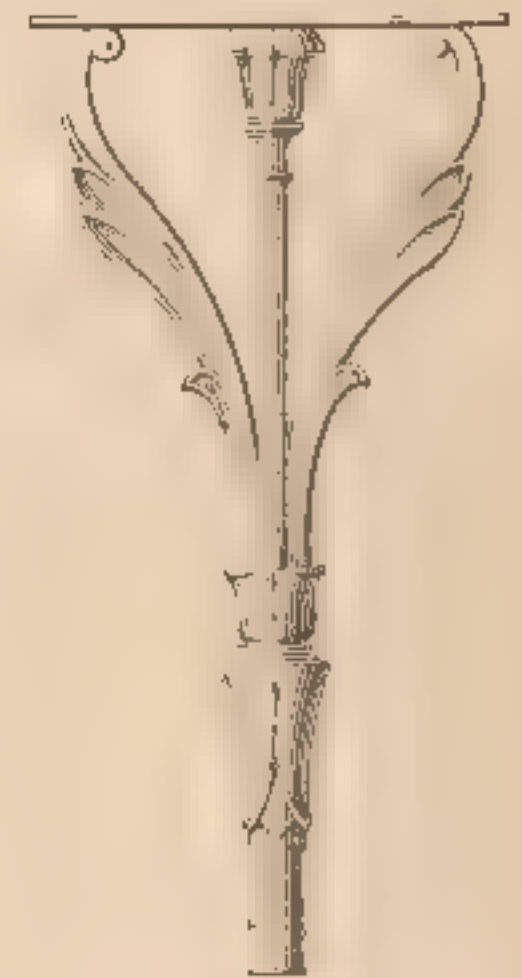
Nº 41



Nº 338



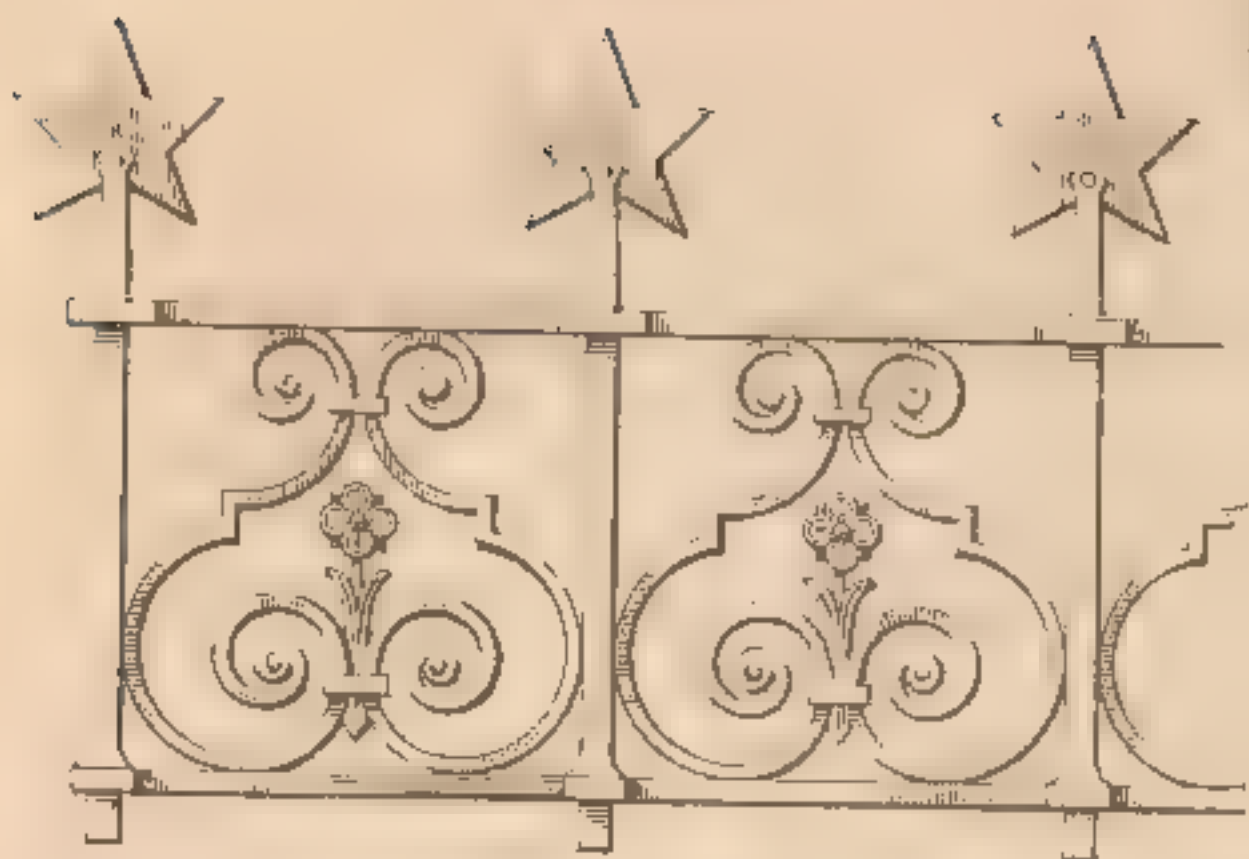
Nº 777



SCALE 1 INCH = FOOT

MACFARLANE'S RAILING & C

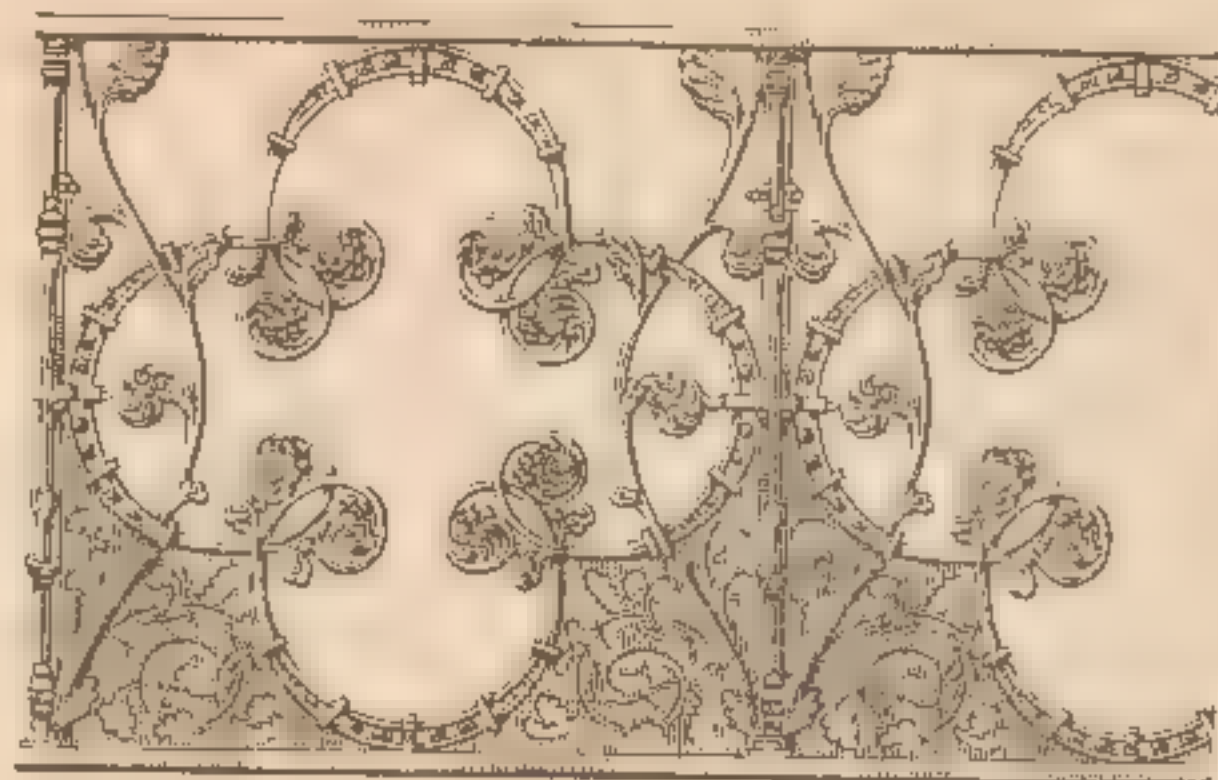
Nº 184



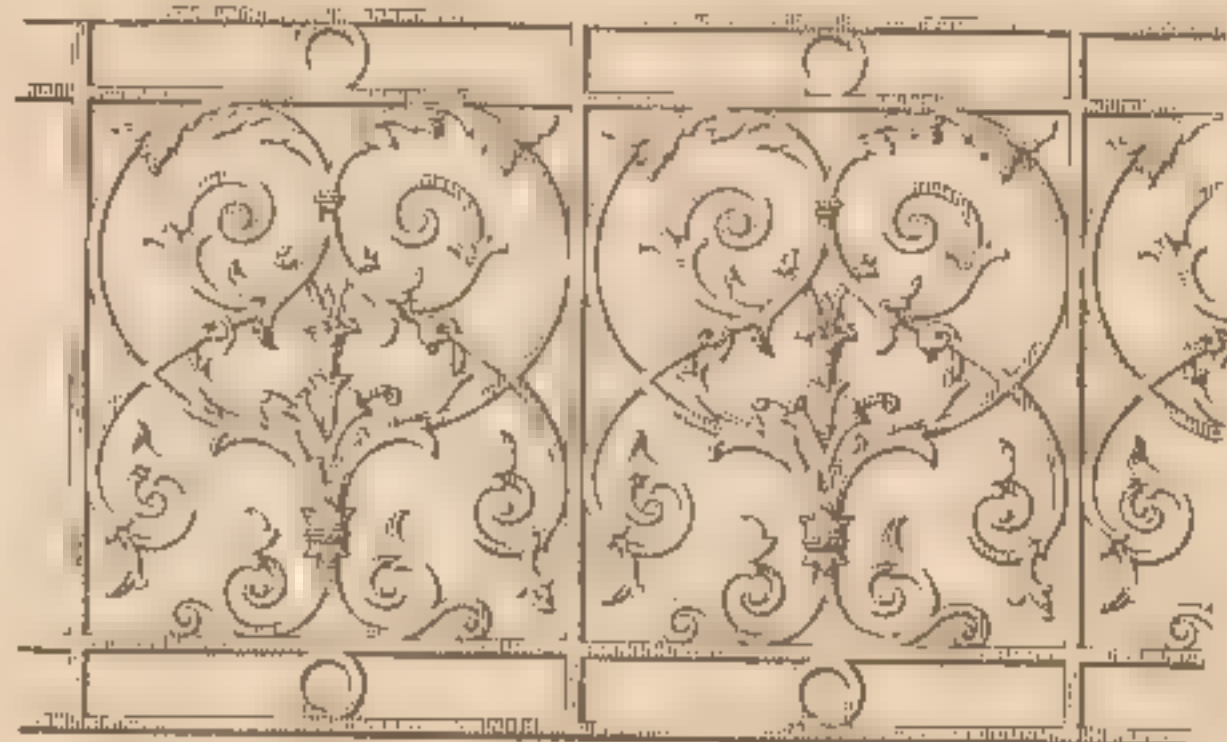
Nº 6



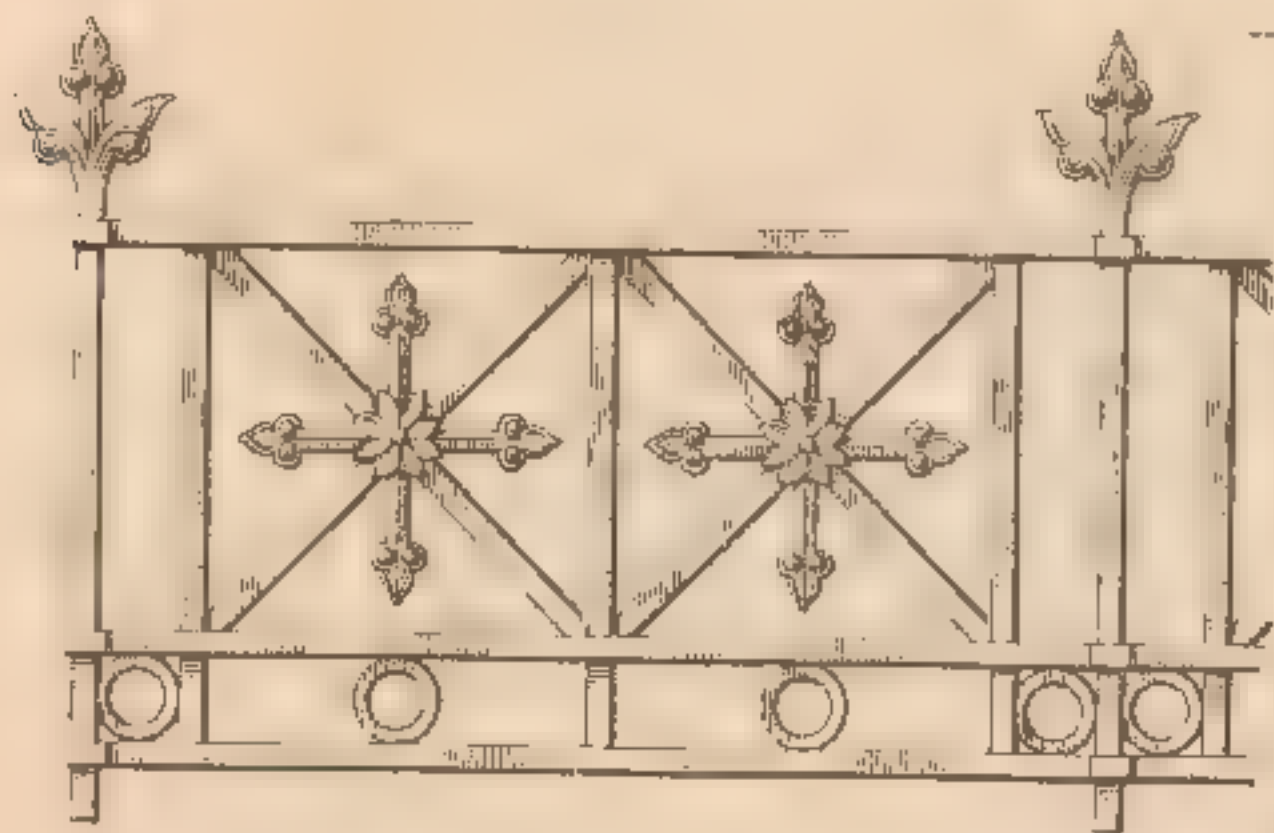
Nº 45



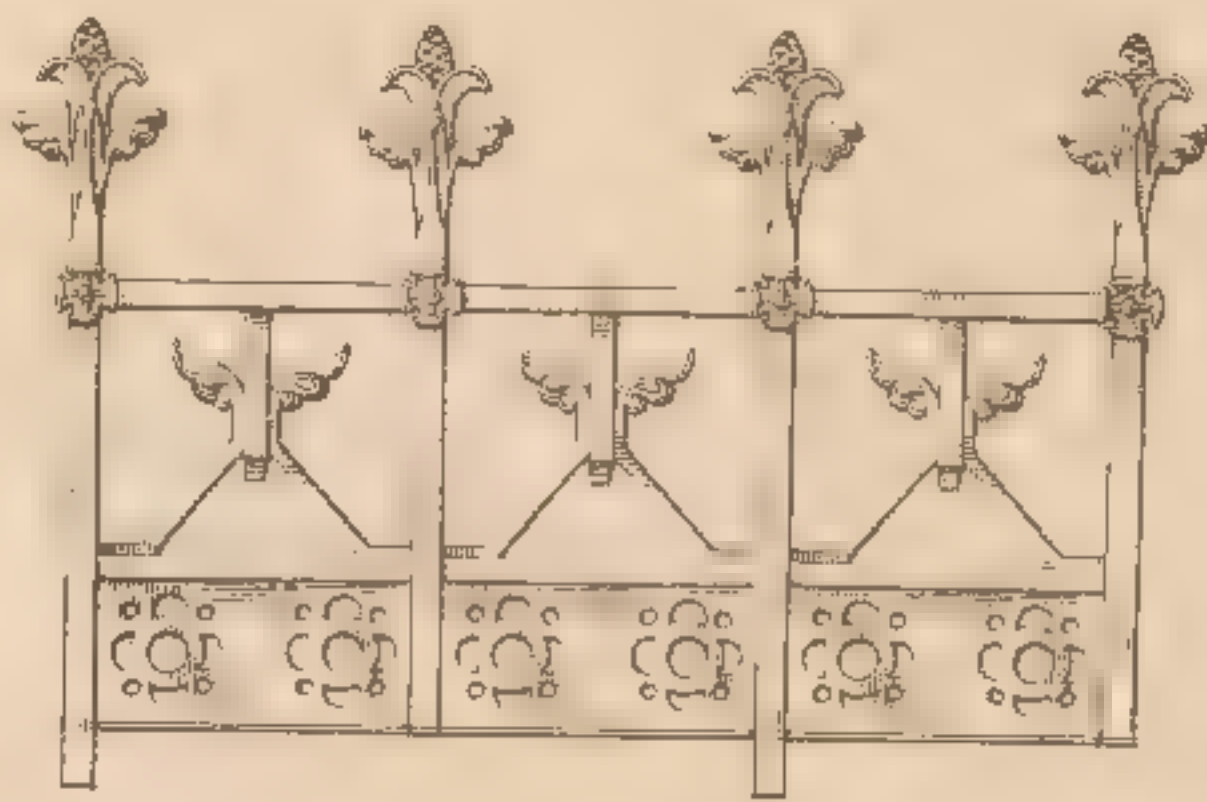
Nº 436



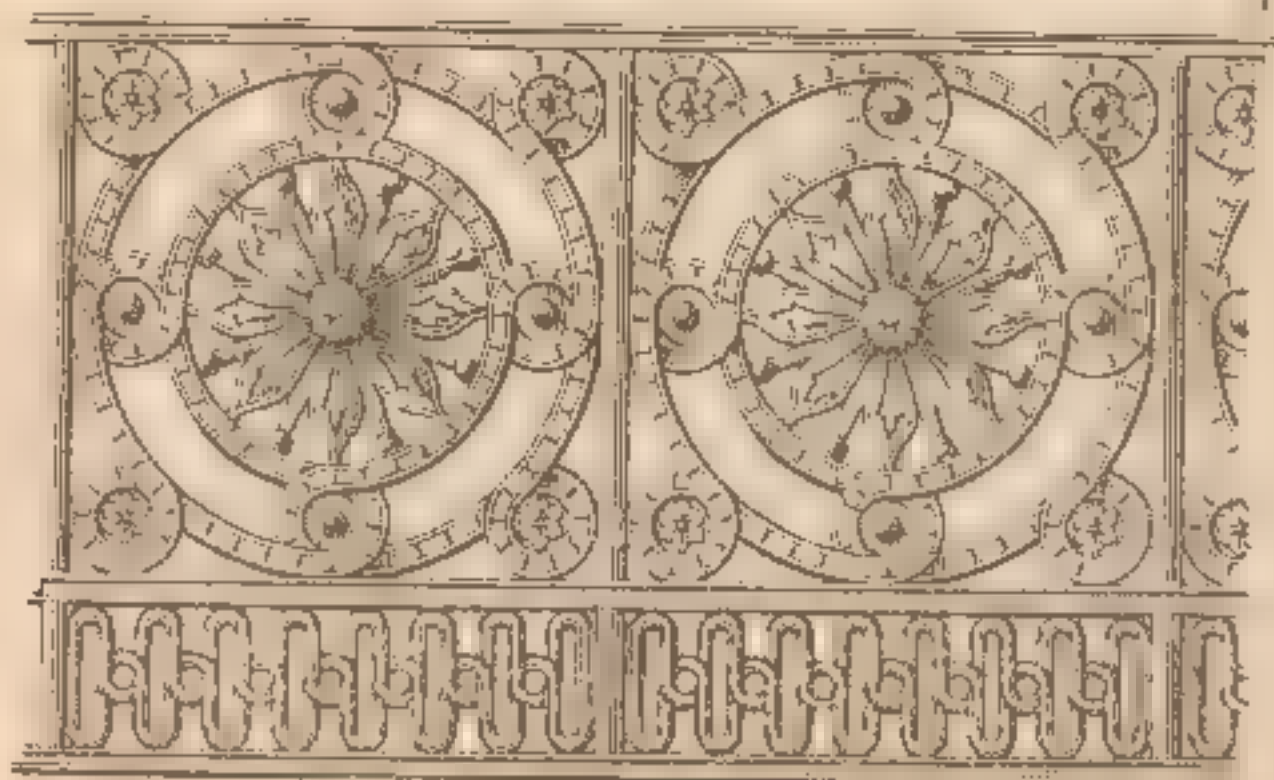
Nº 2.4.



Nº 191



Nº 53



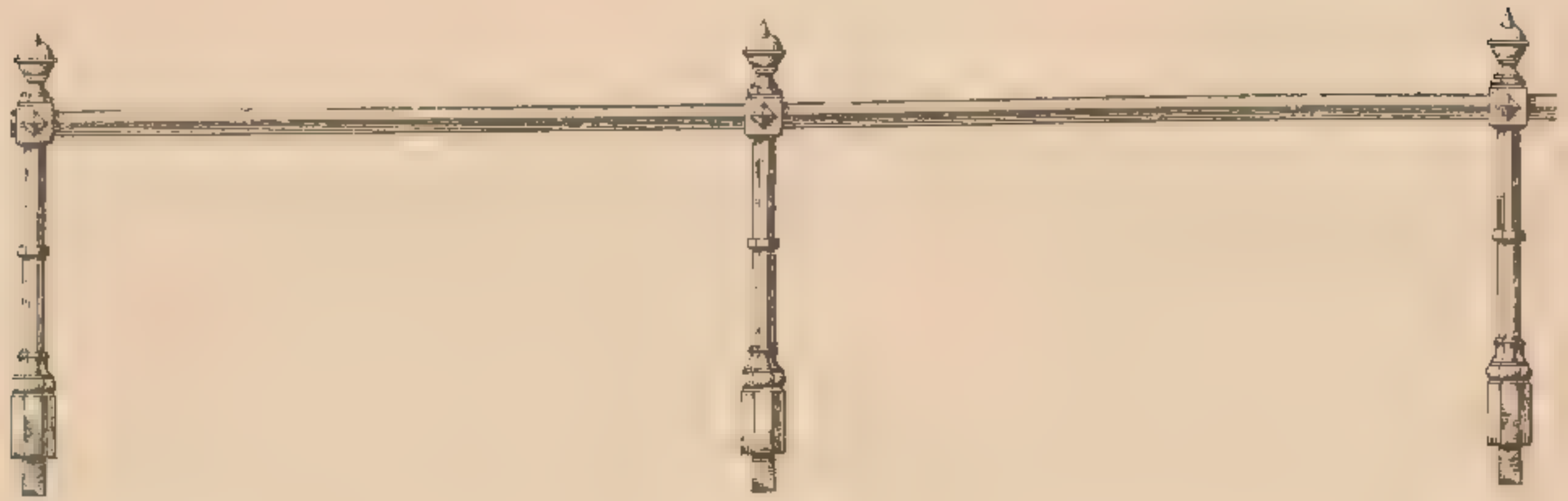
Nº 68



SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING & CO

Nº 188



Nº 48



Nº 95

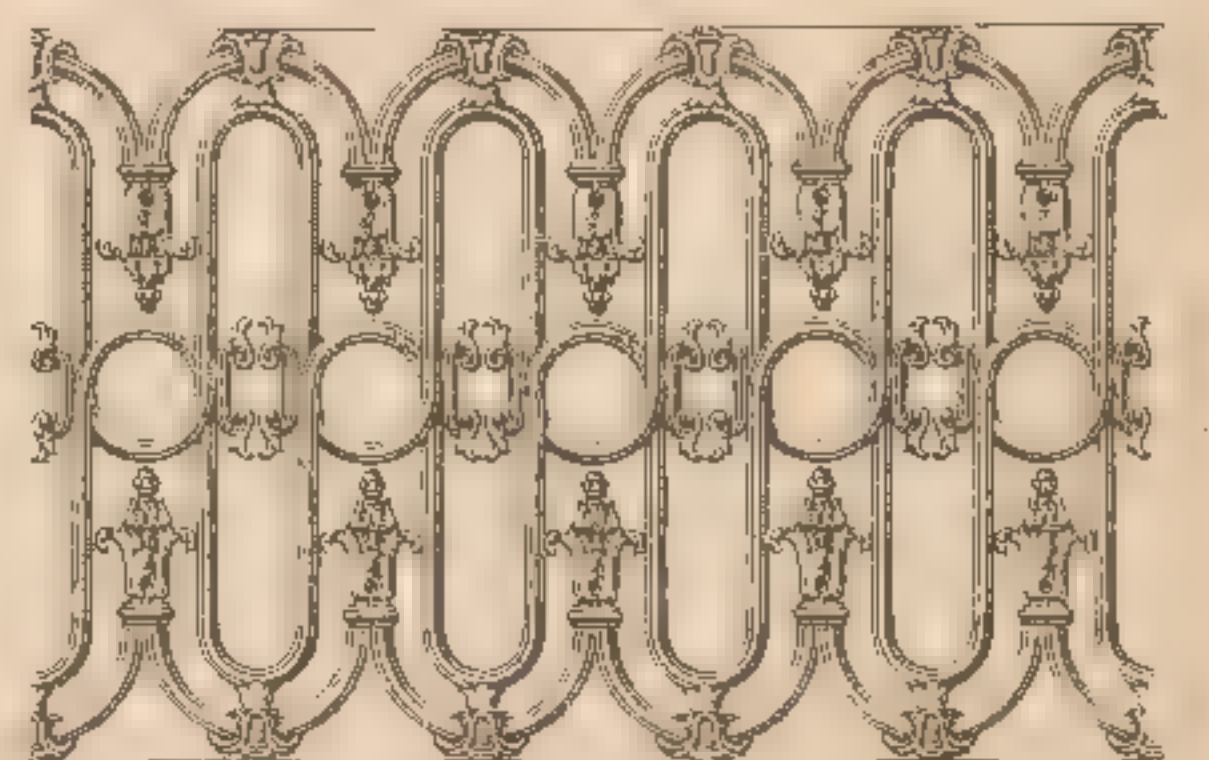


Nº 274

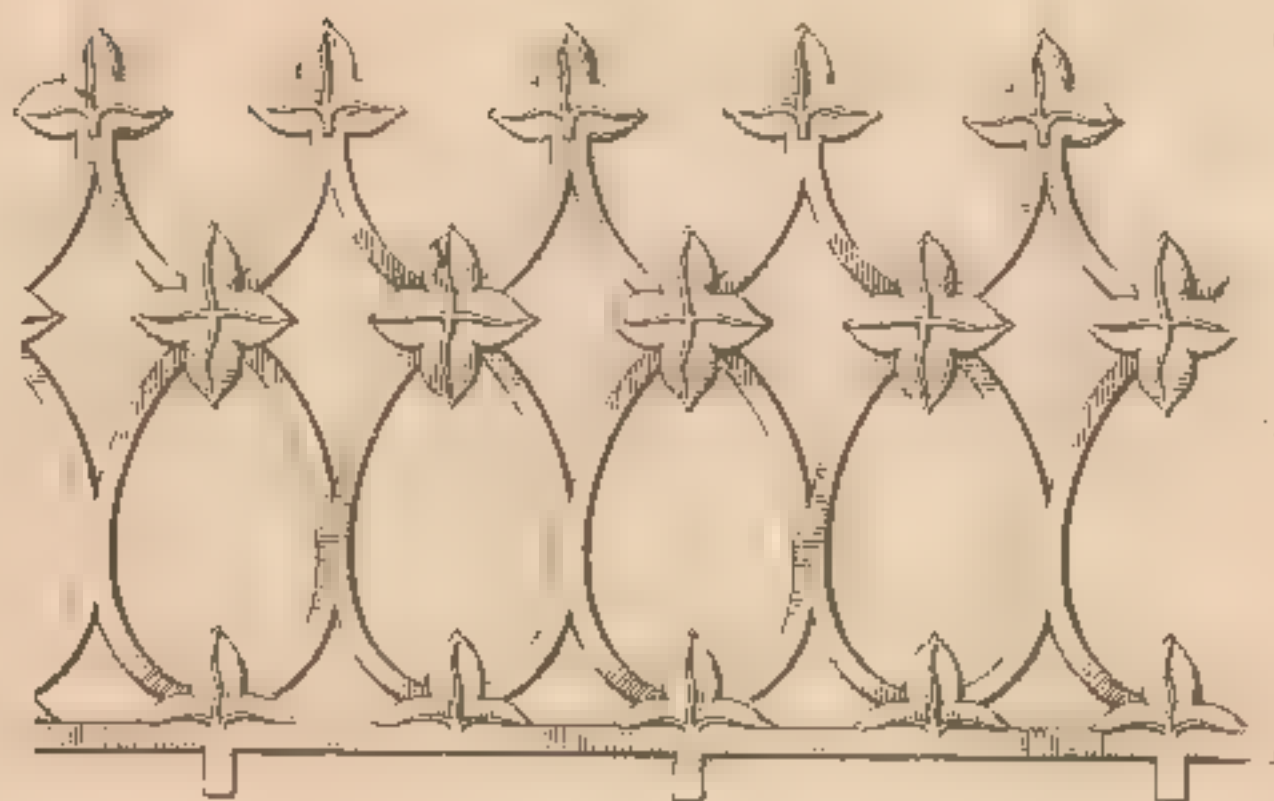


One face

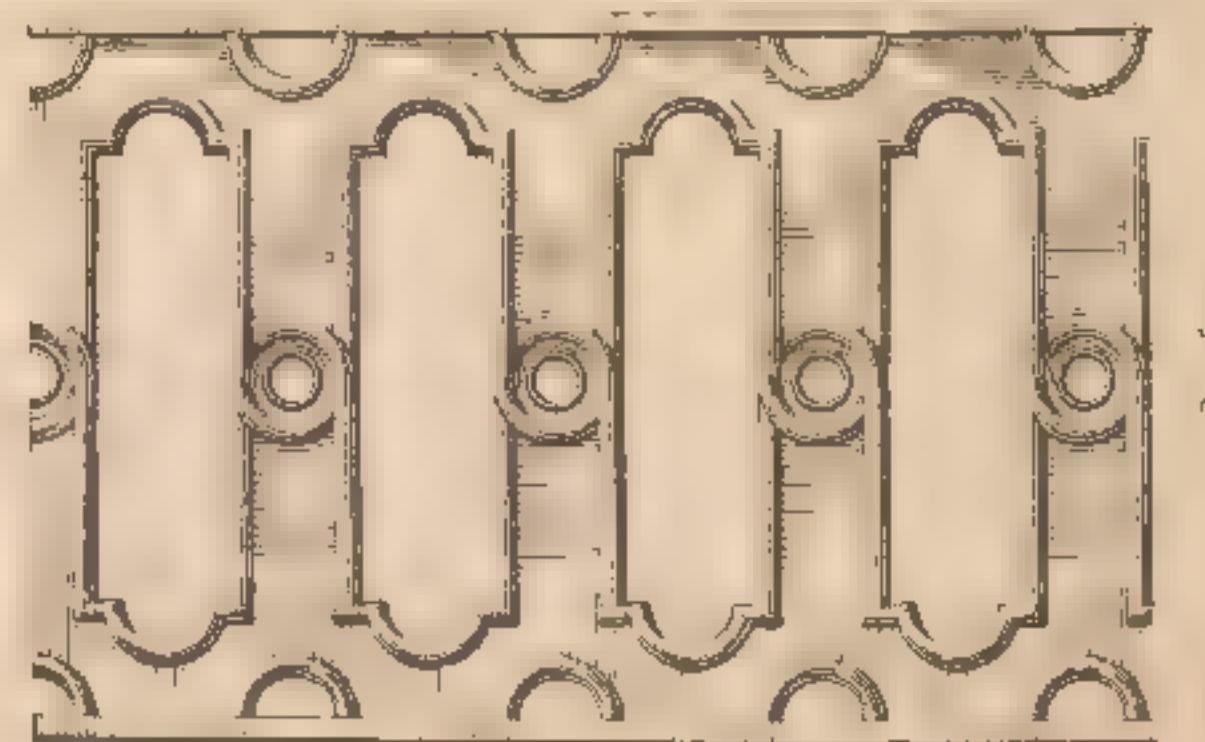
Nº 299



Nº 35



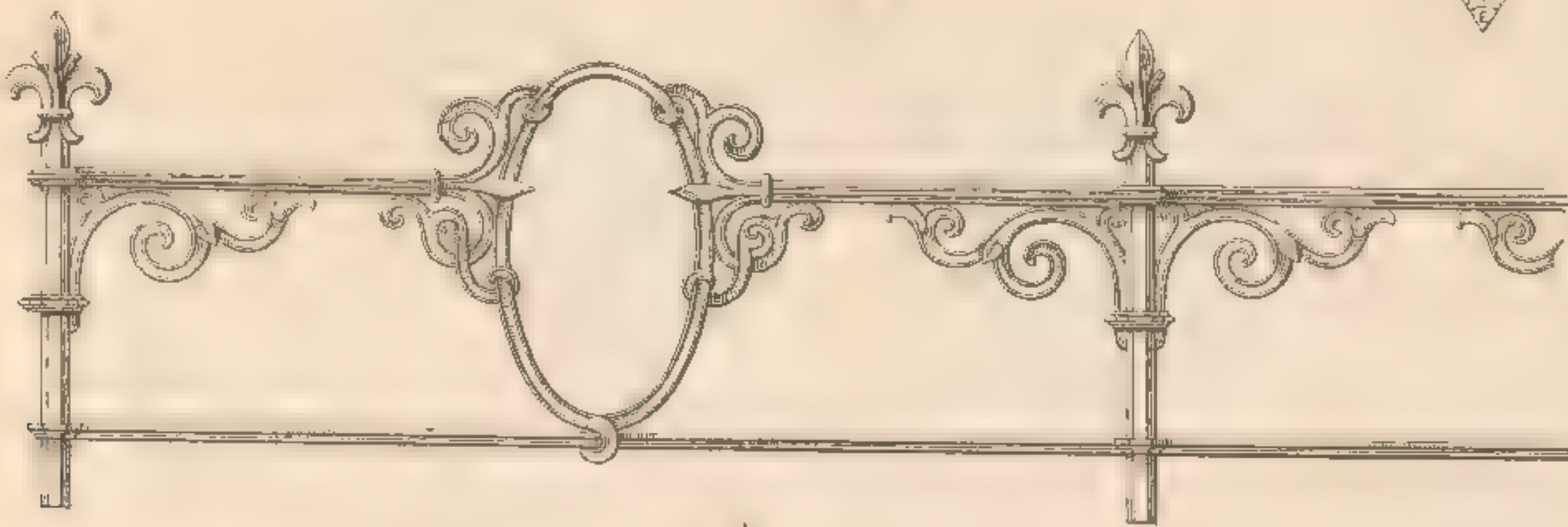
Nº 327



SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING &C

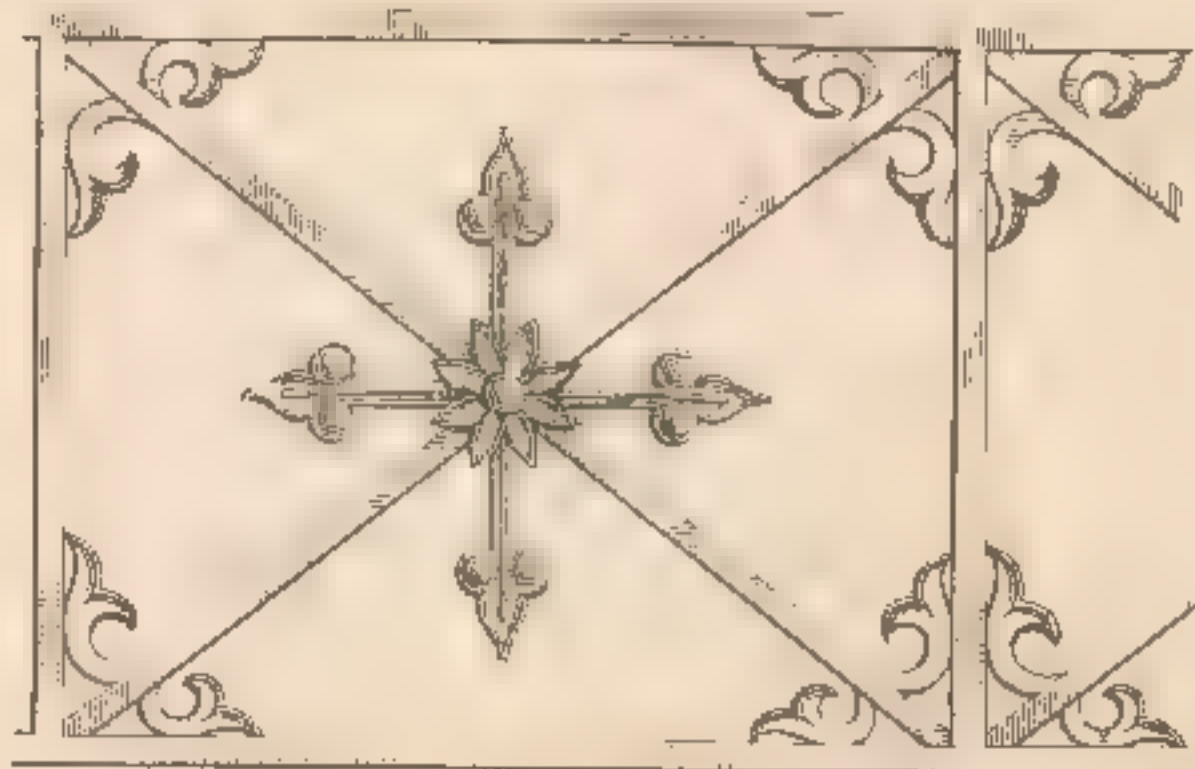
Nº 181



Nº 19

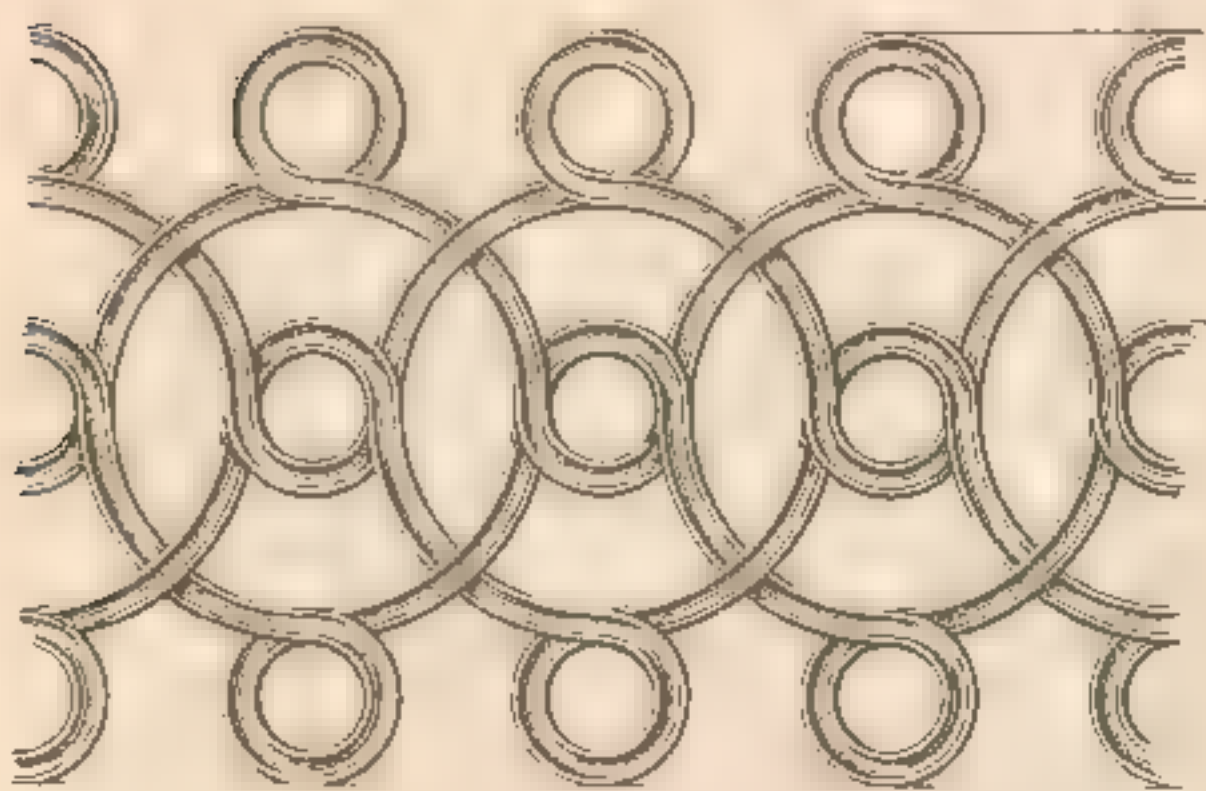


Nº 209



Nº 393

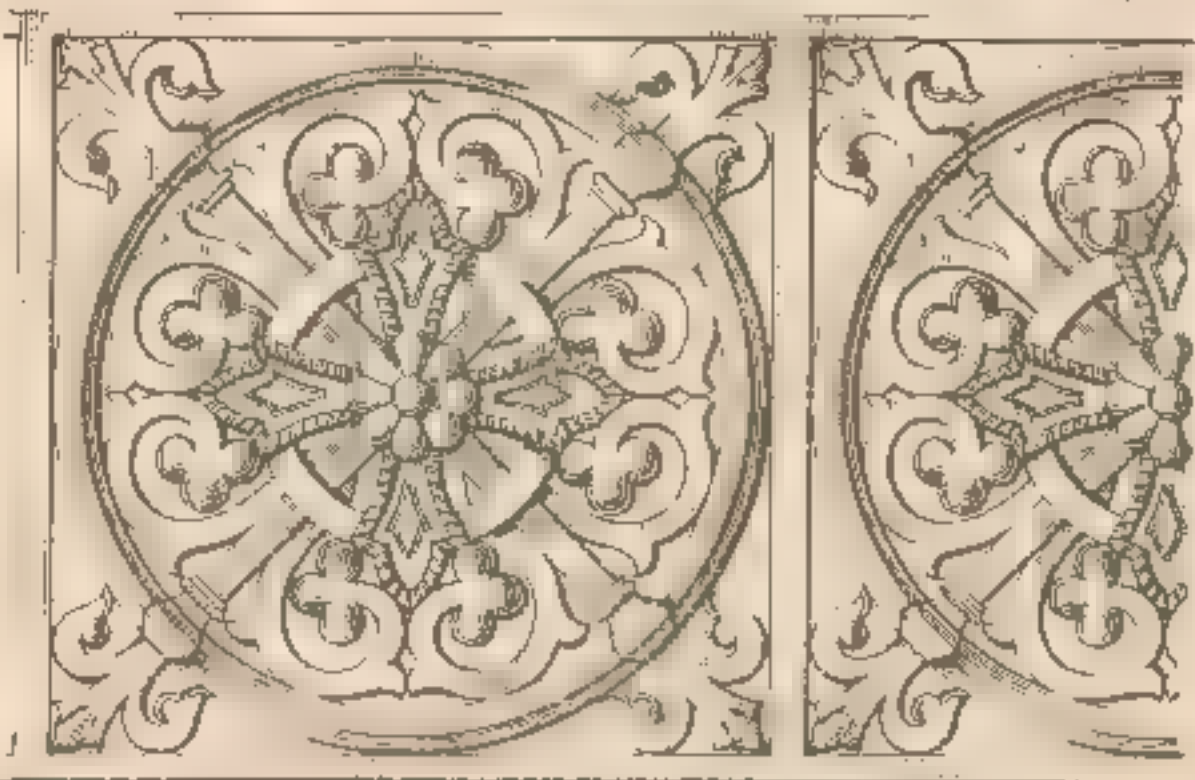
Nº 80



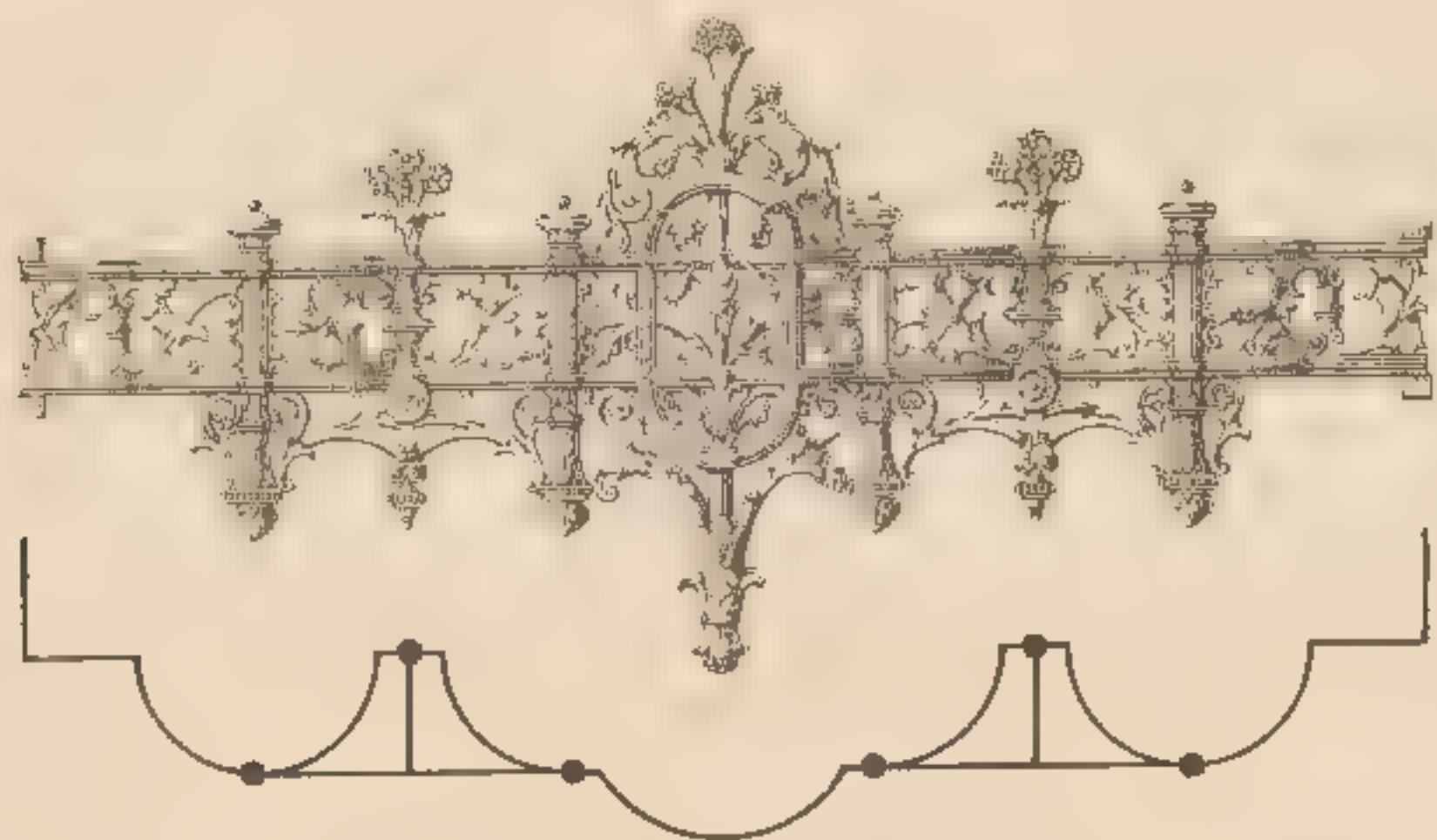
Nº 467



Nº 160



MACFARLANE'S RAILING & CO



4 0", 4 3" and 4 6" long Other sizes to order.

No 27



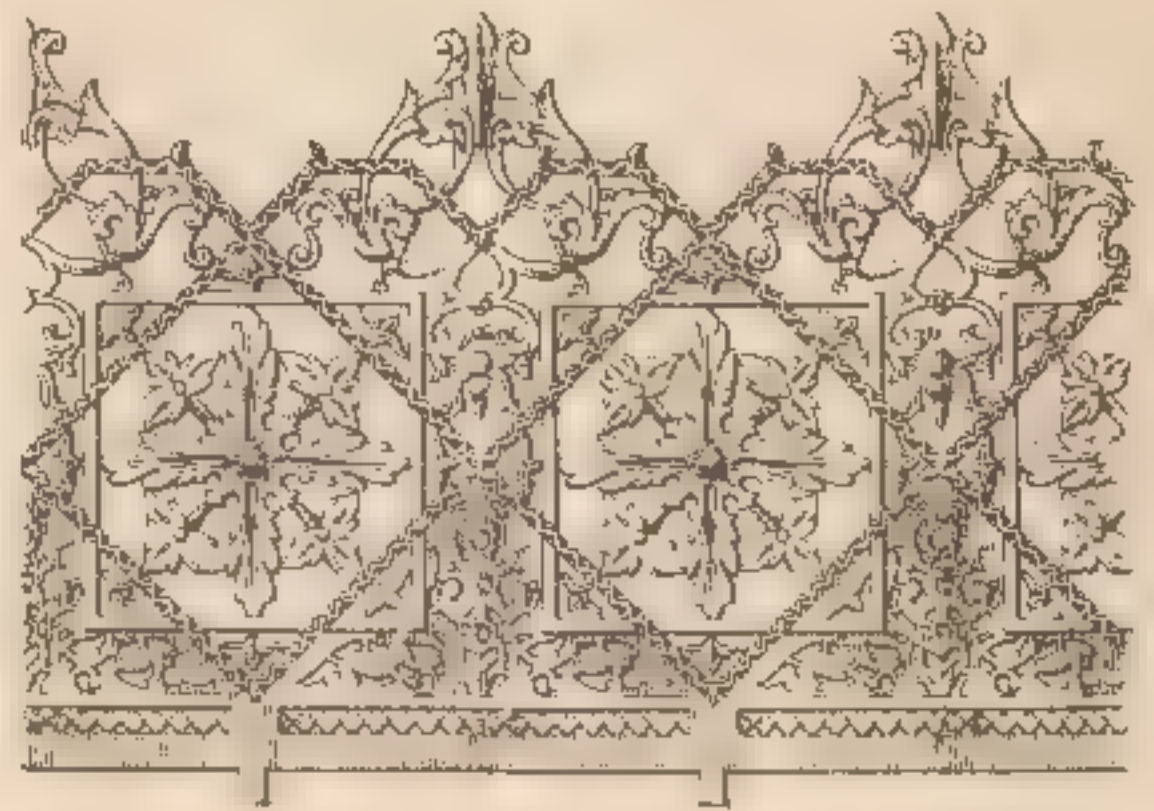
No 295



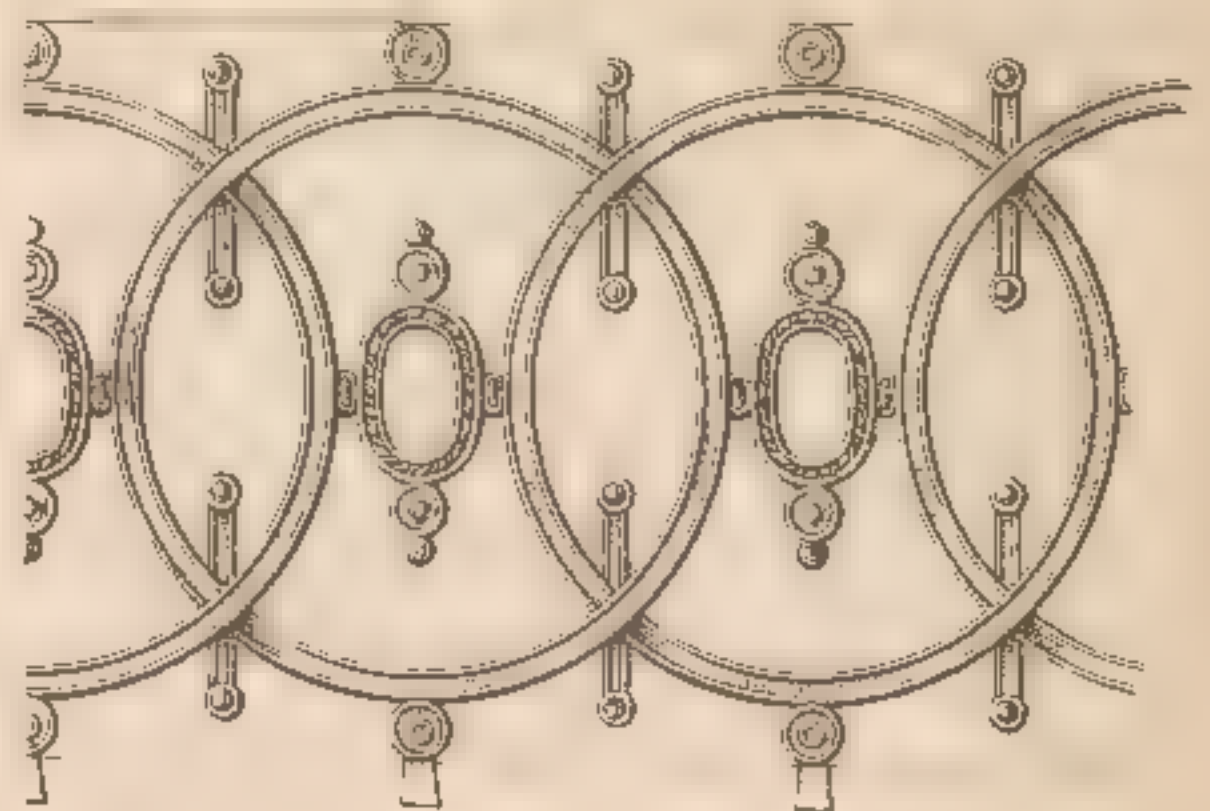
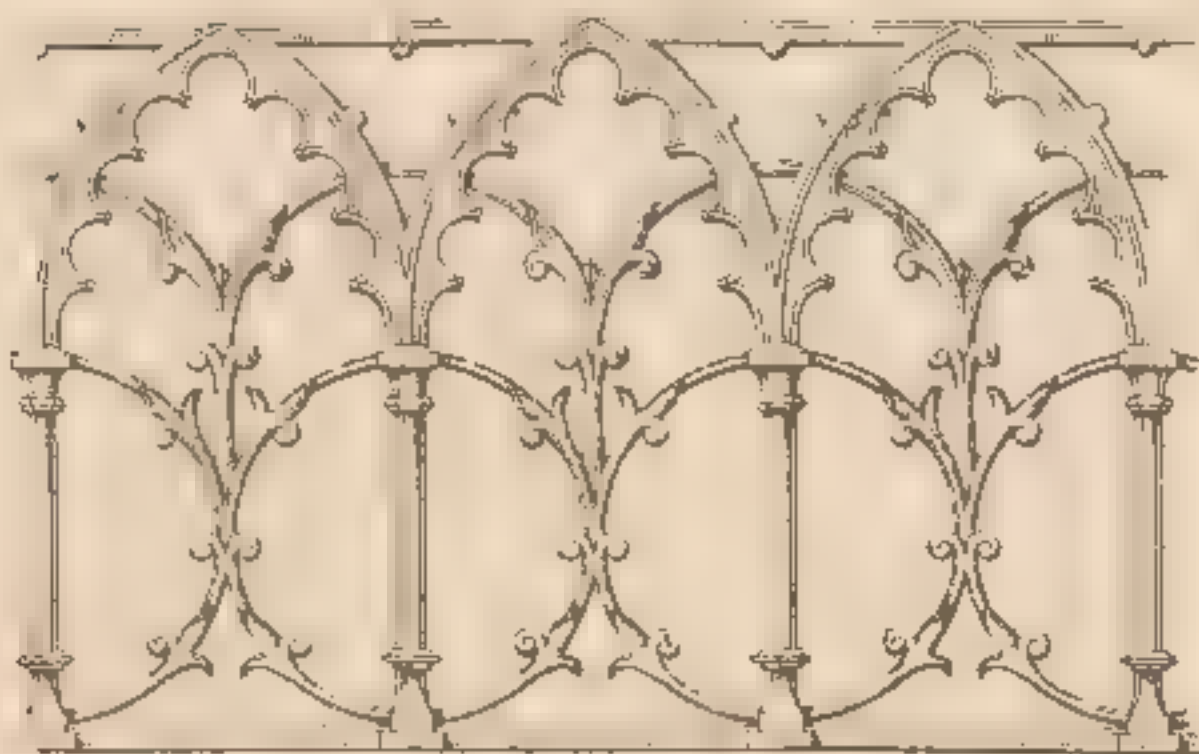
No 30



No 31



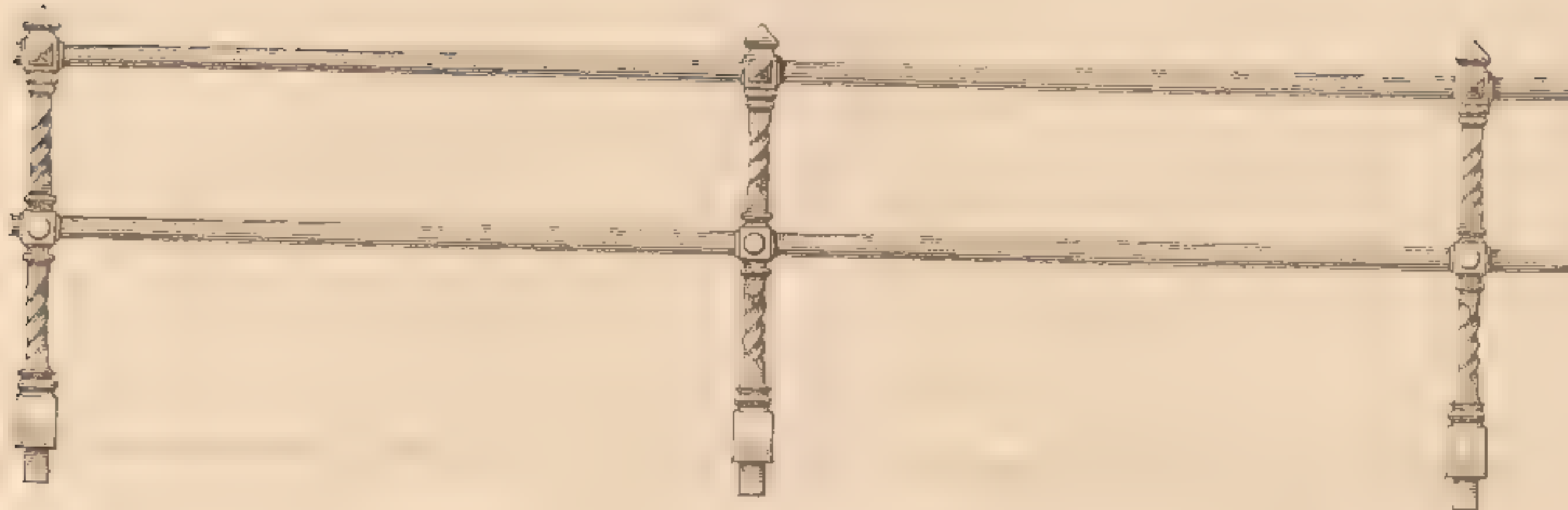
No 28



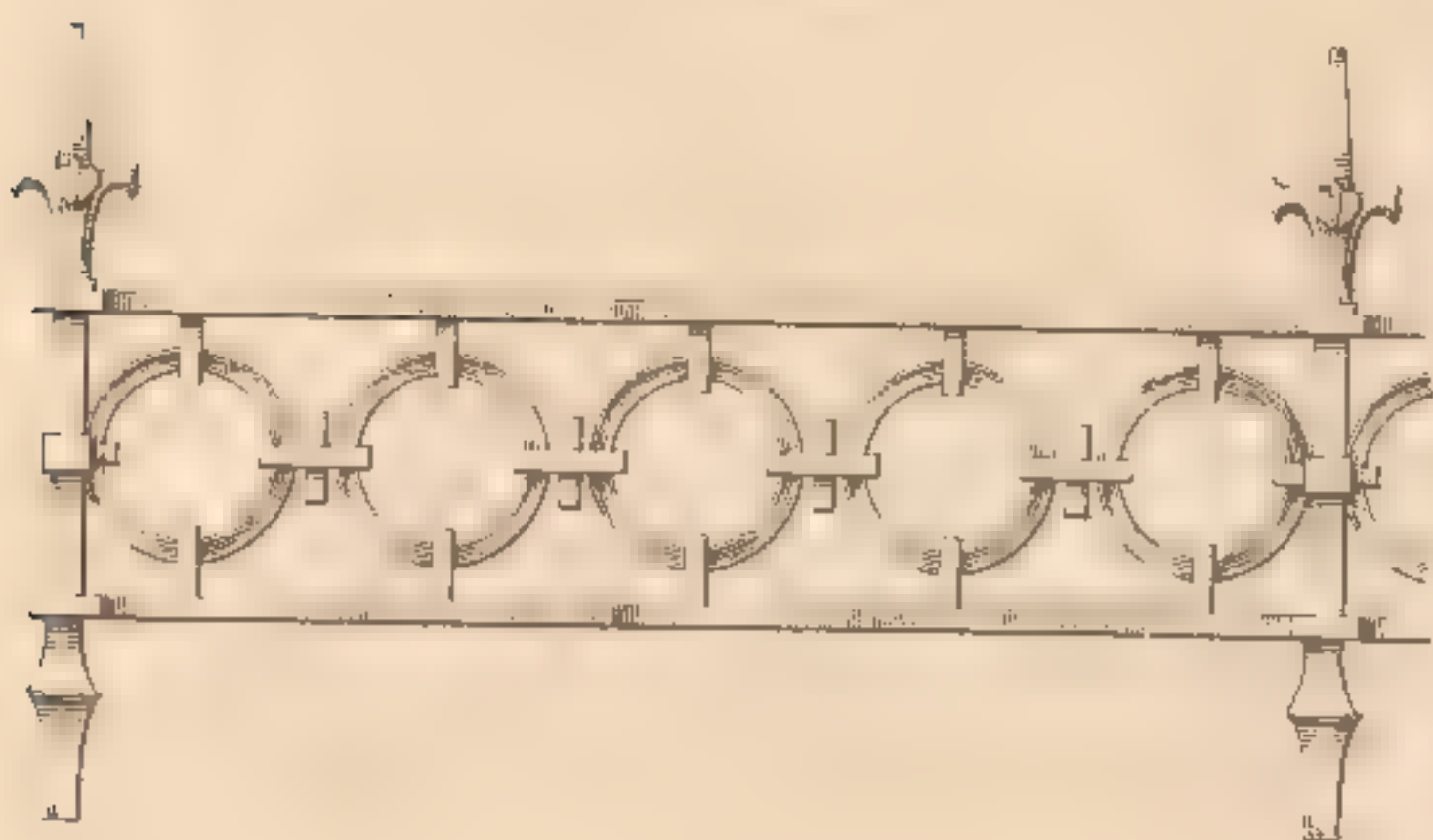
1" ALL INCH = 1 FOOT

MACFARLANE'S RAILING & CO

No 434



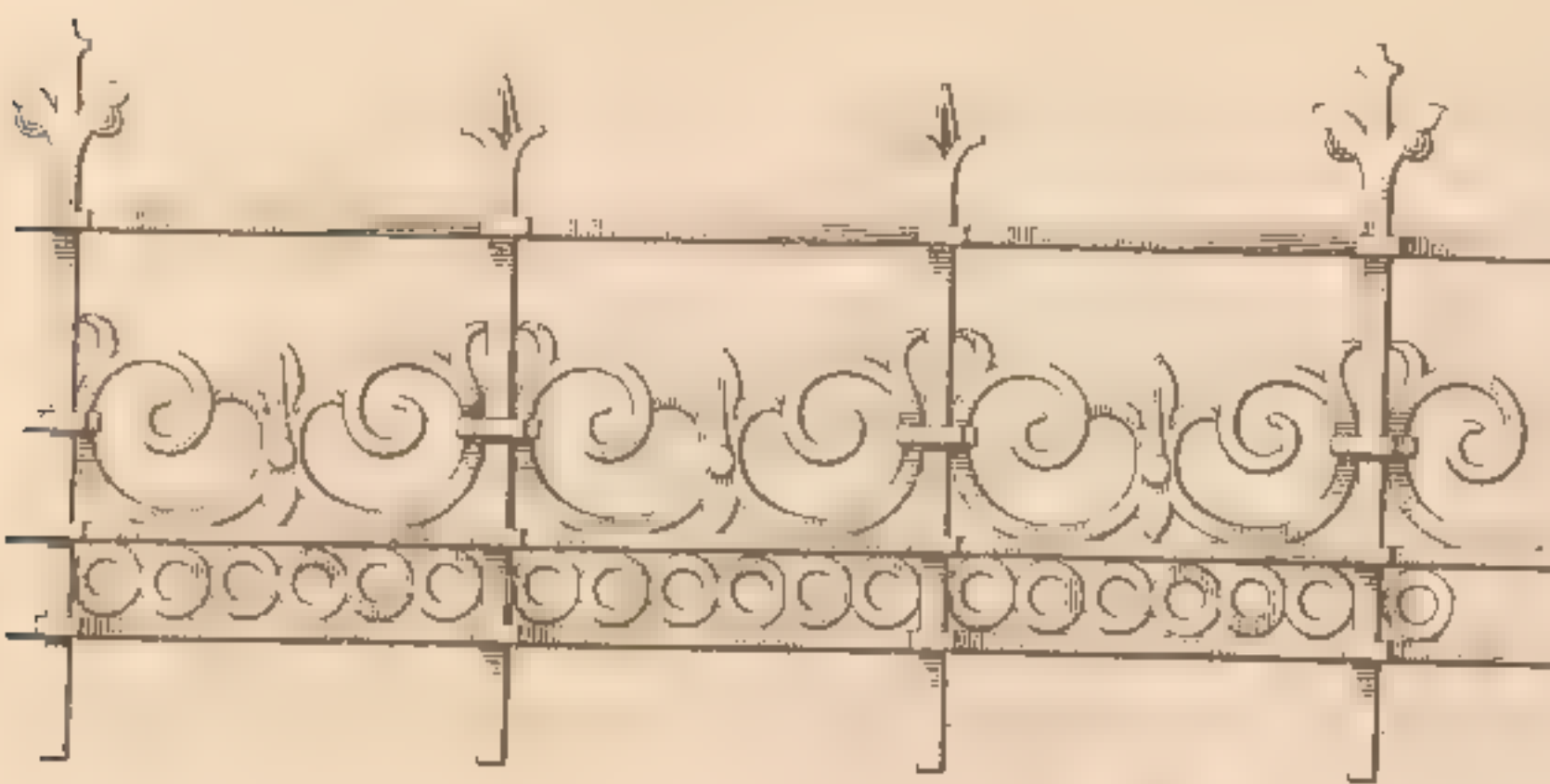
No 44



No 45



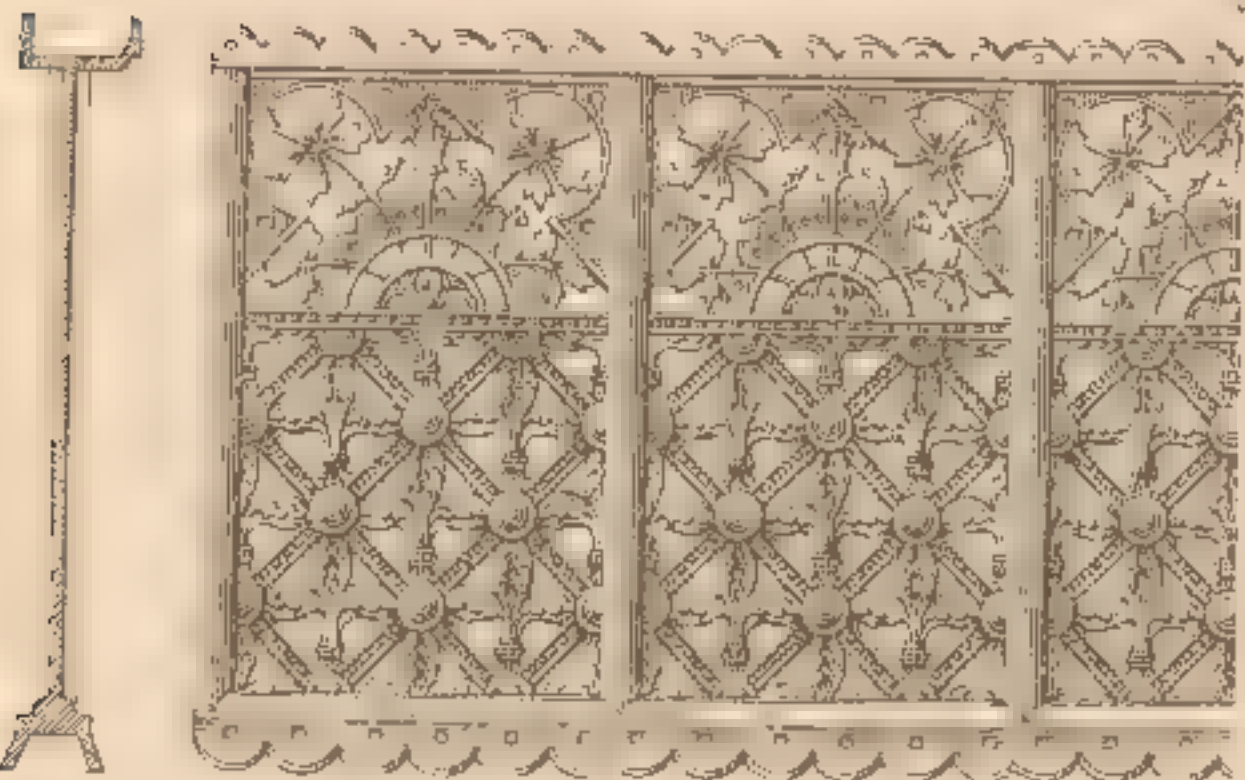
No 46



No 47

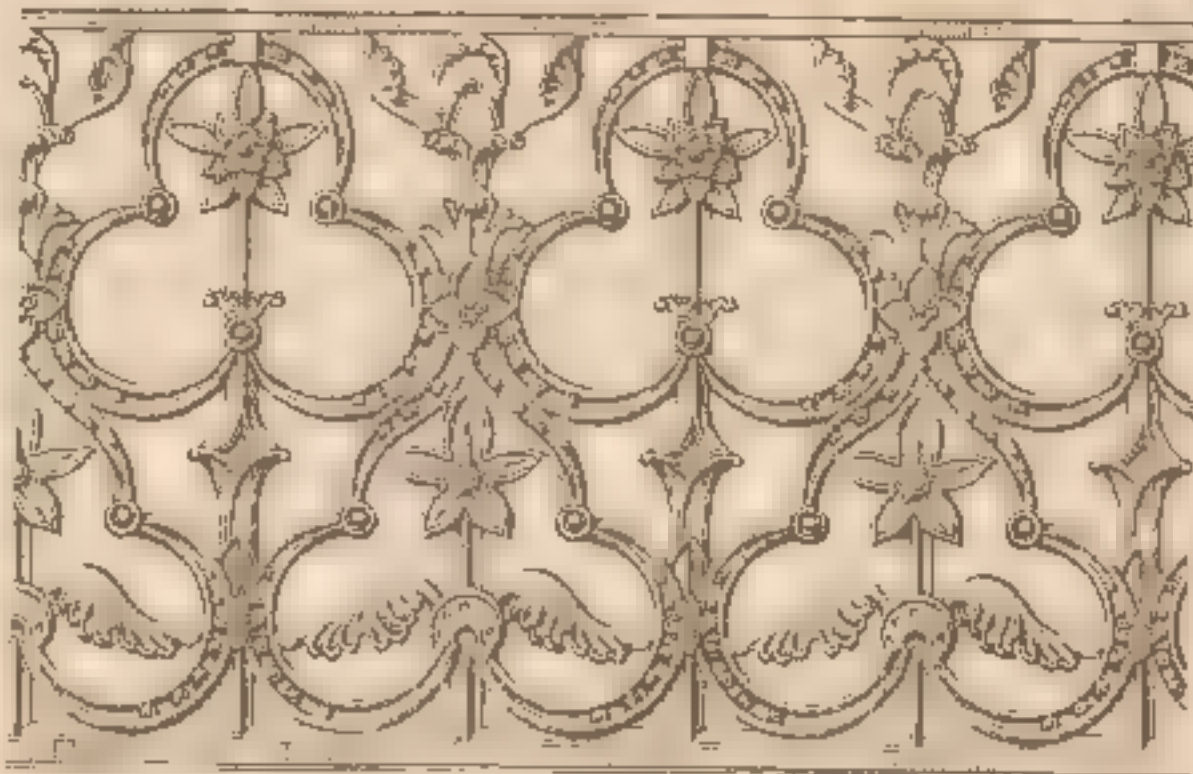


No 48



One face

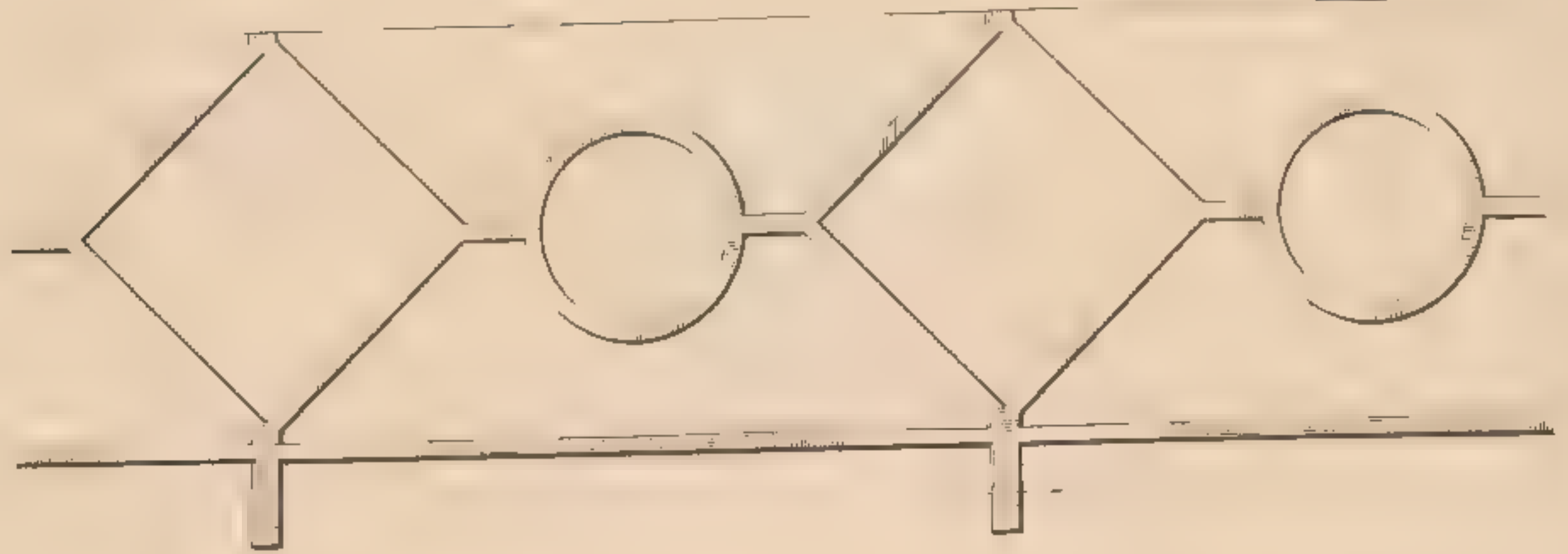
No 49



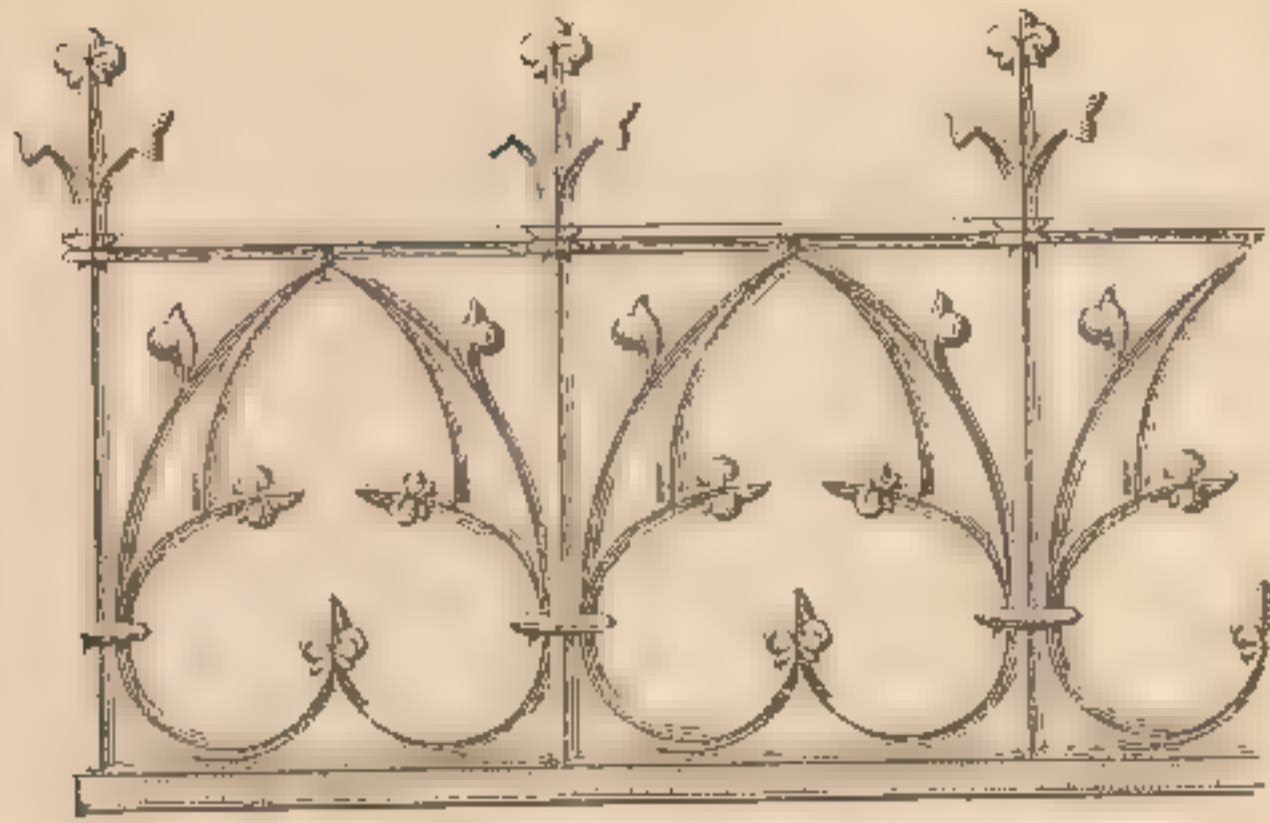
SCALE 1 INCH = FOOT

MACFARLANE'S RAILING & CO

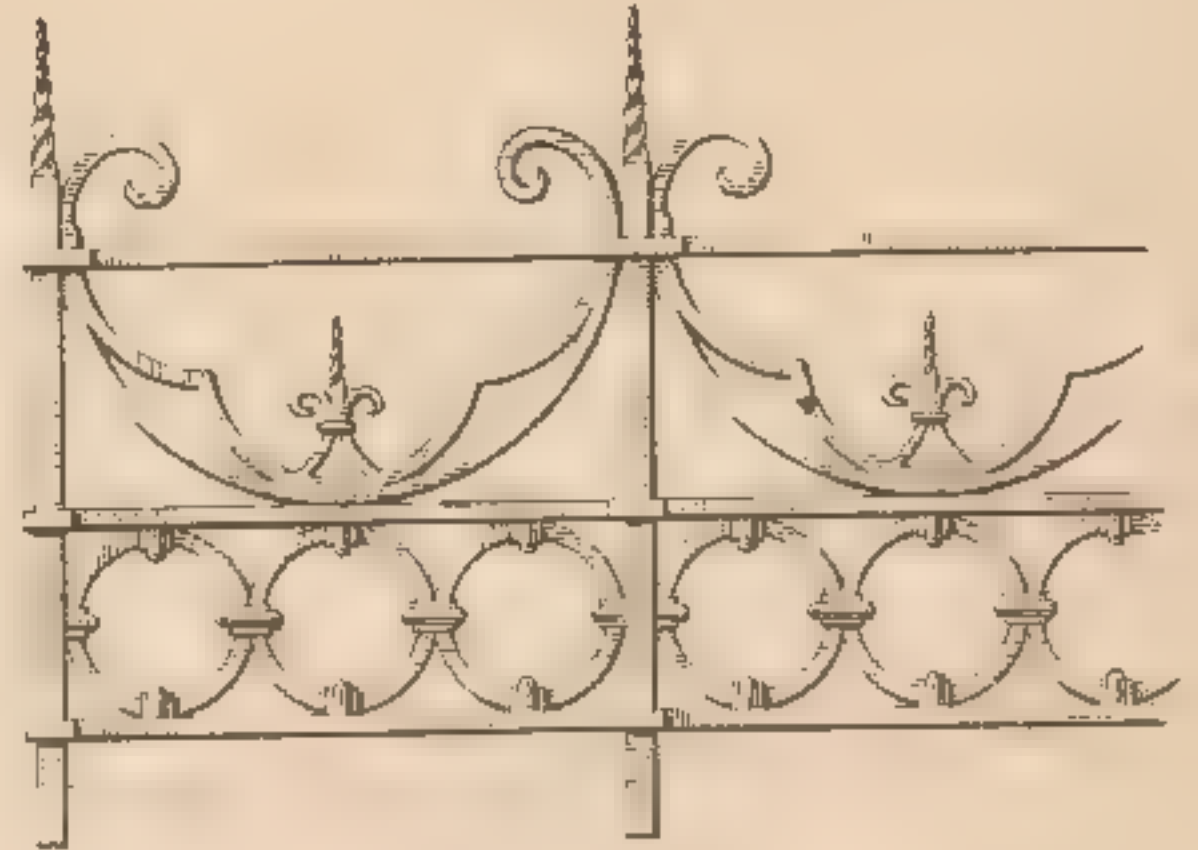
Nº 402



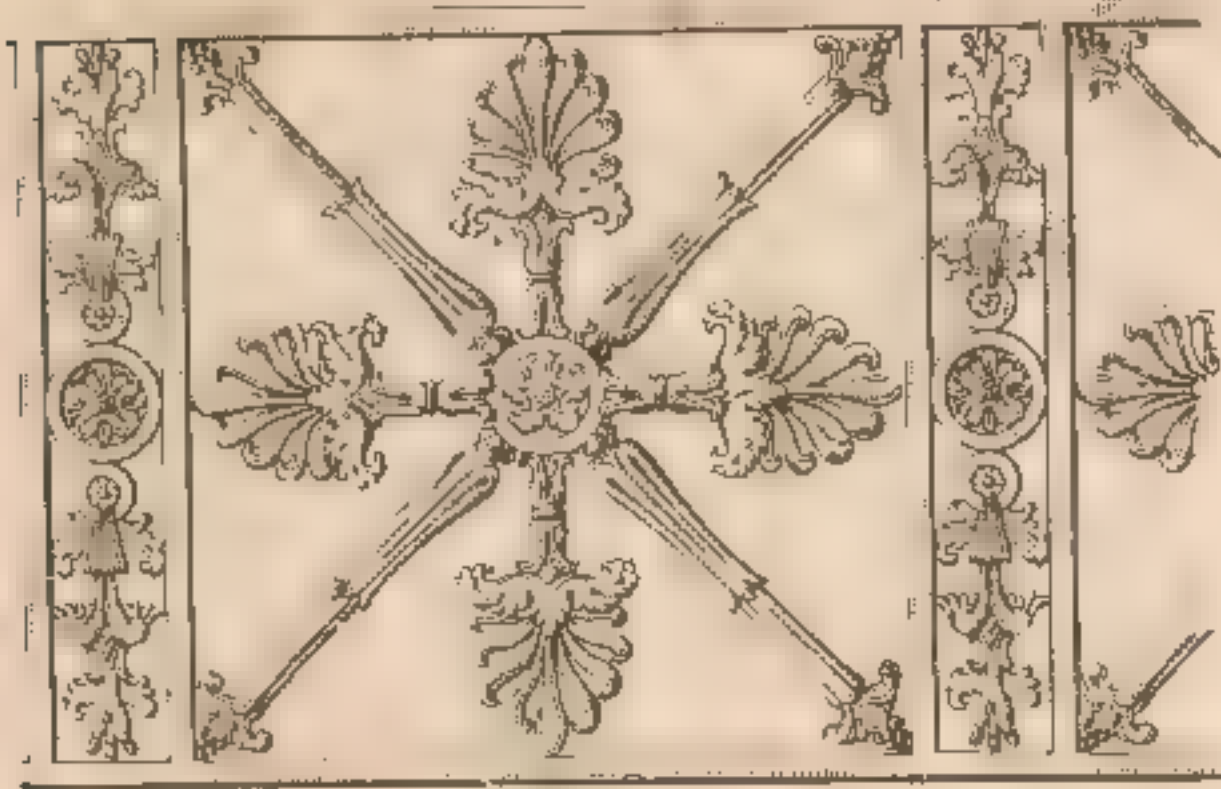
Nº 40



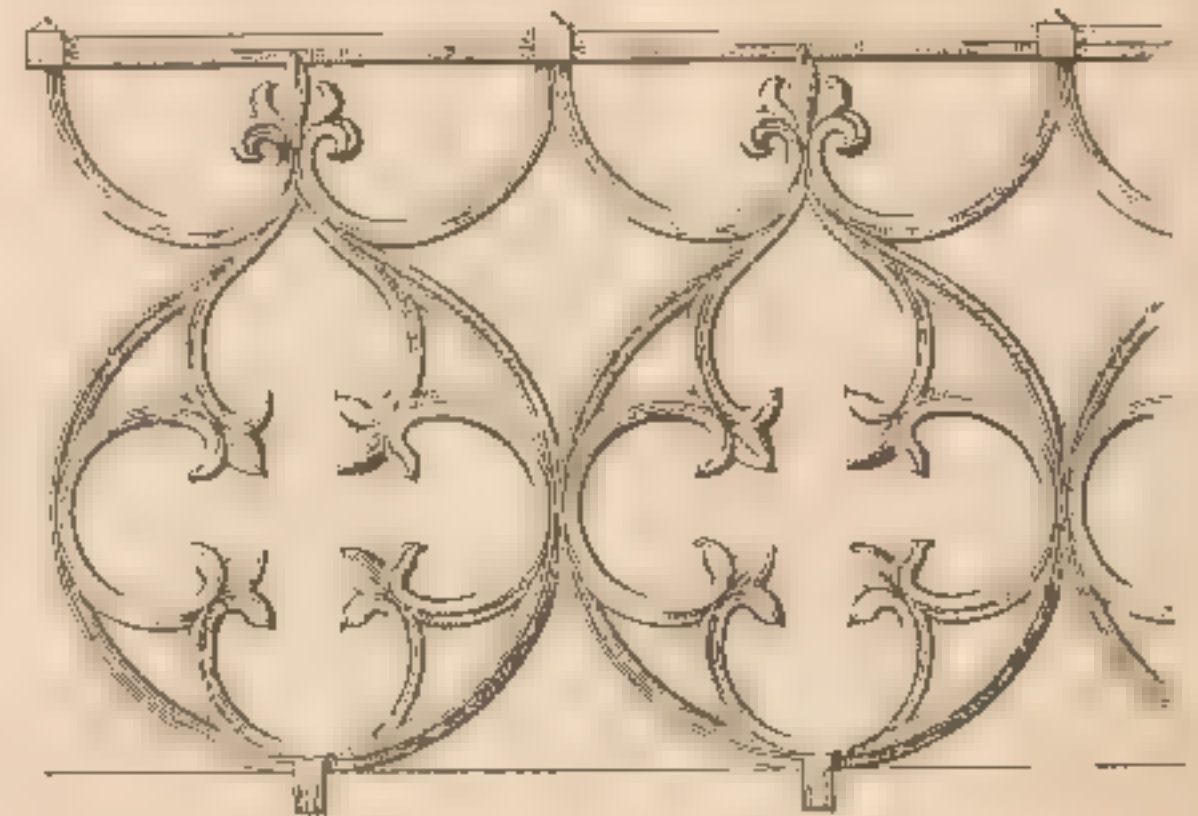
Nº 0



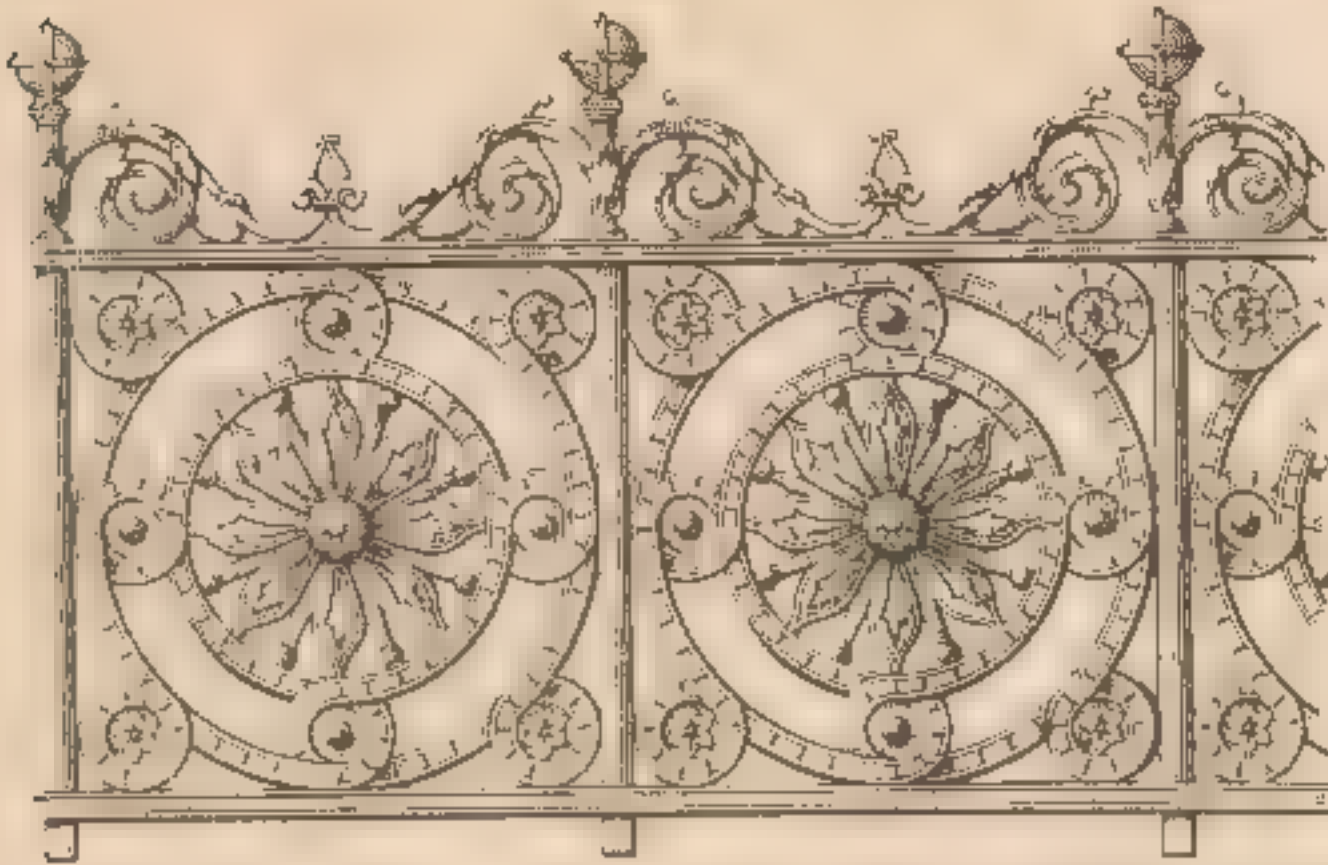
Nº 24



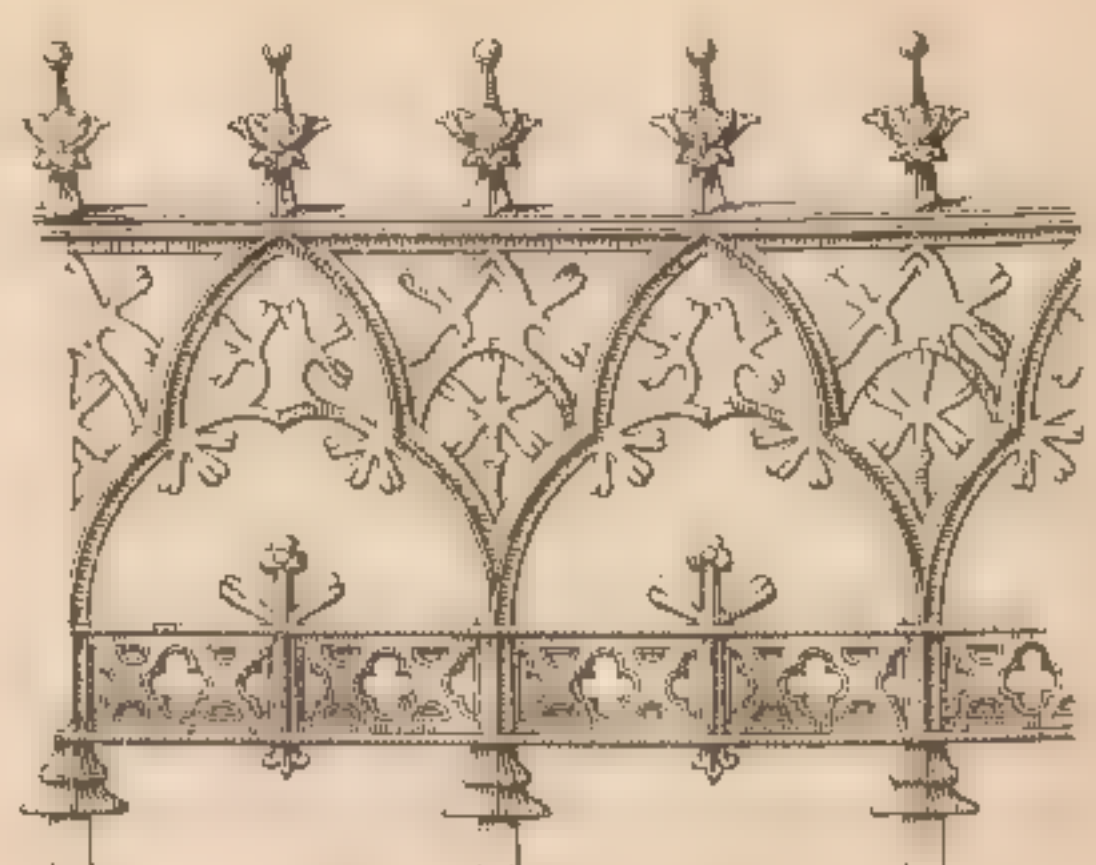
Nº 32



Nº 53



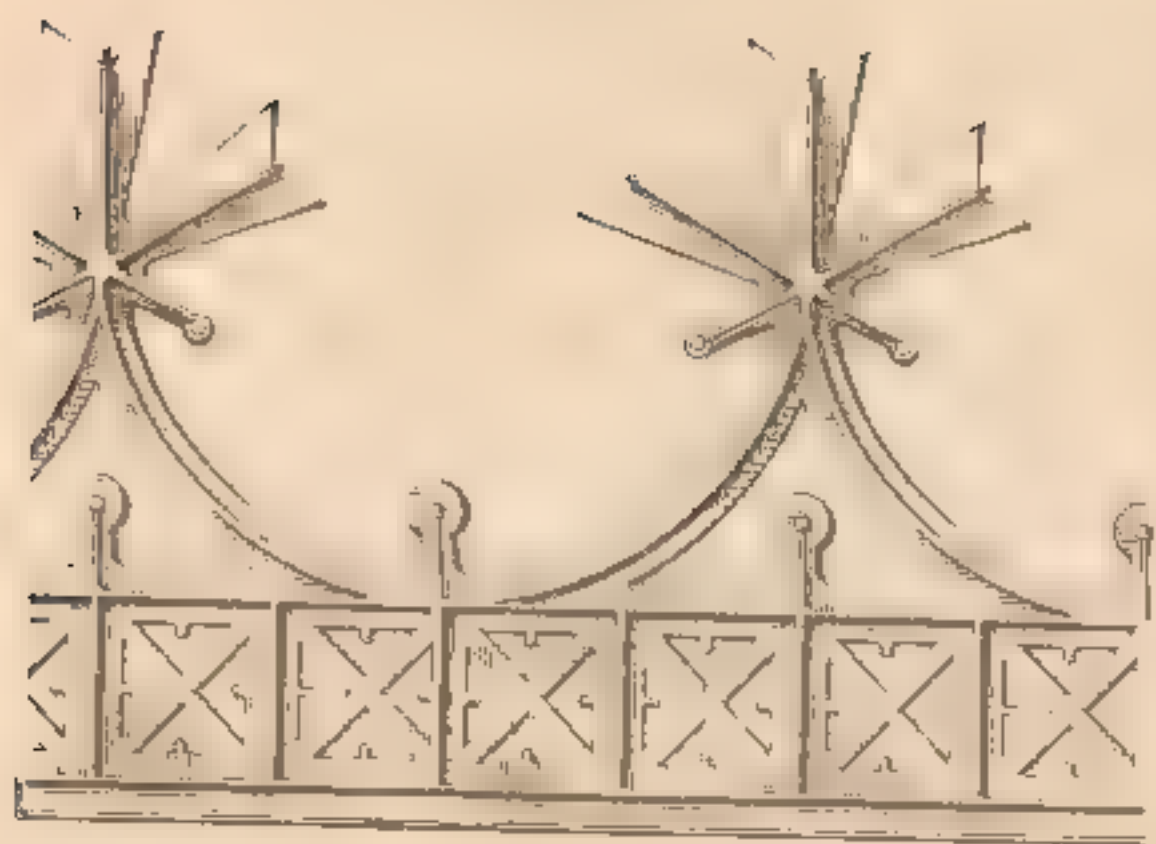
Nº 44



SCALE 1 INCH = 1 FOOT

MACARLANE, HALL 8

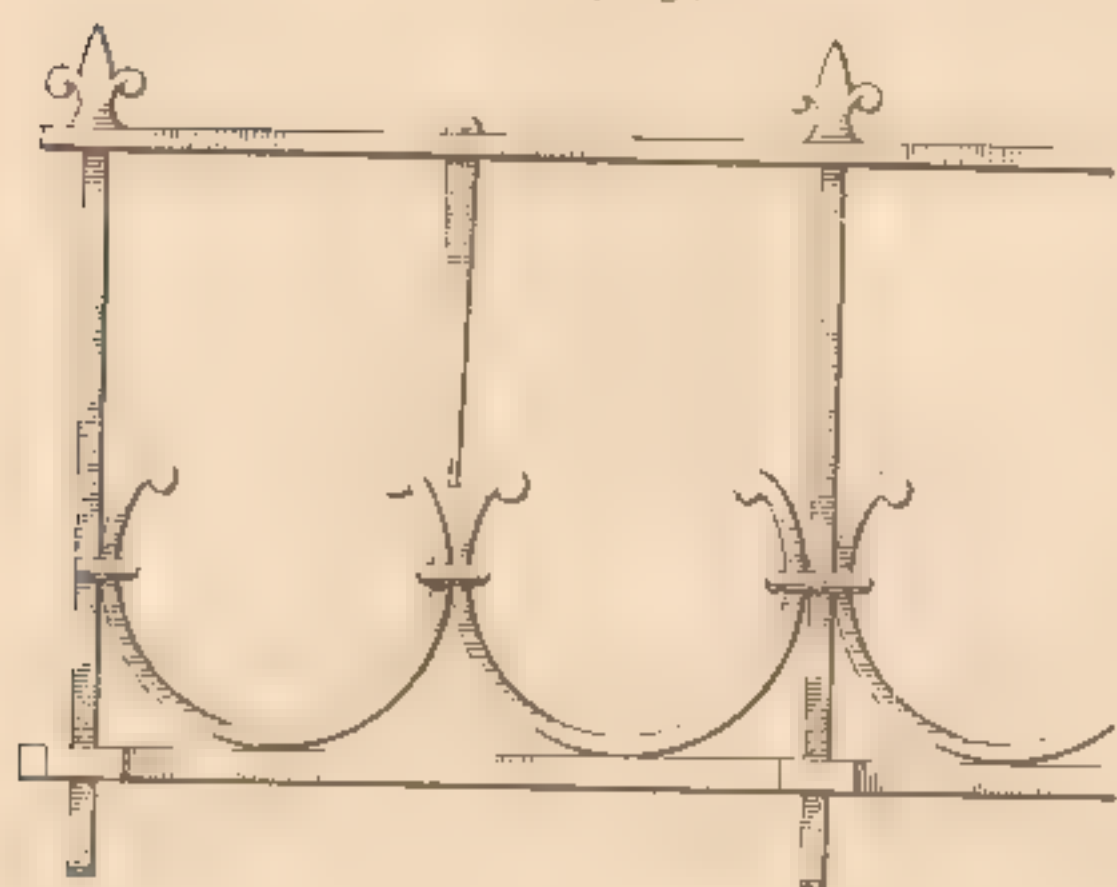
Nº 5



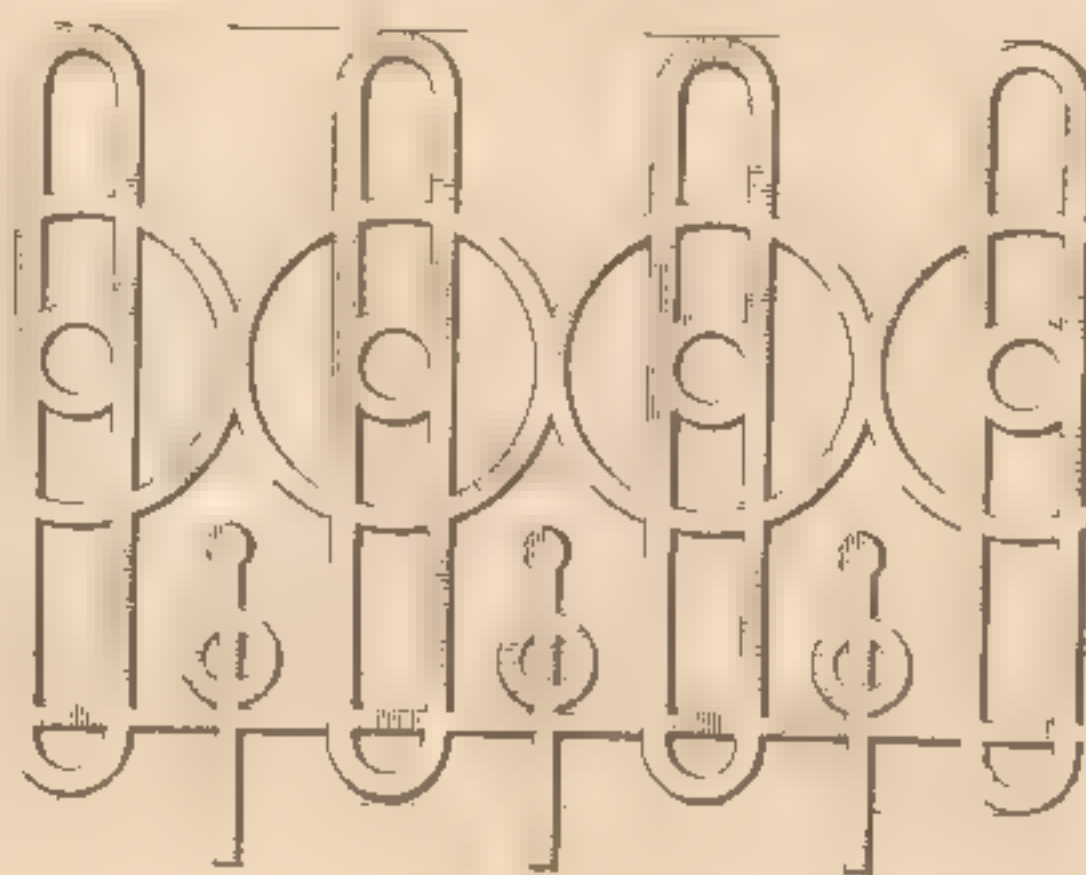
Nº 94



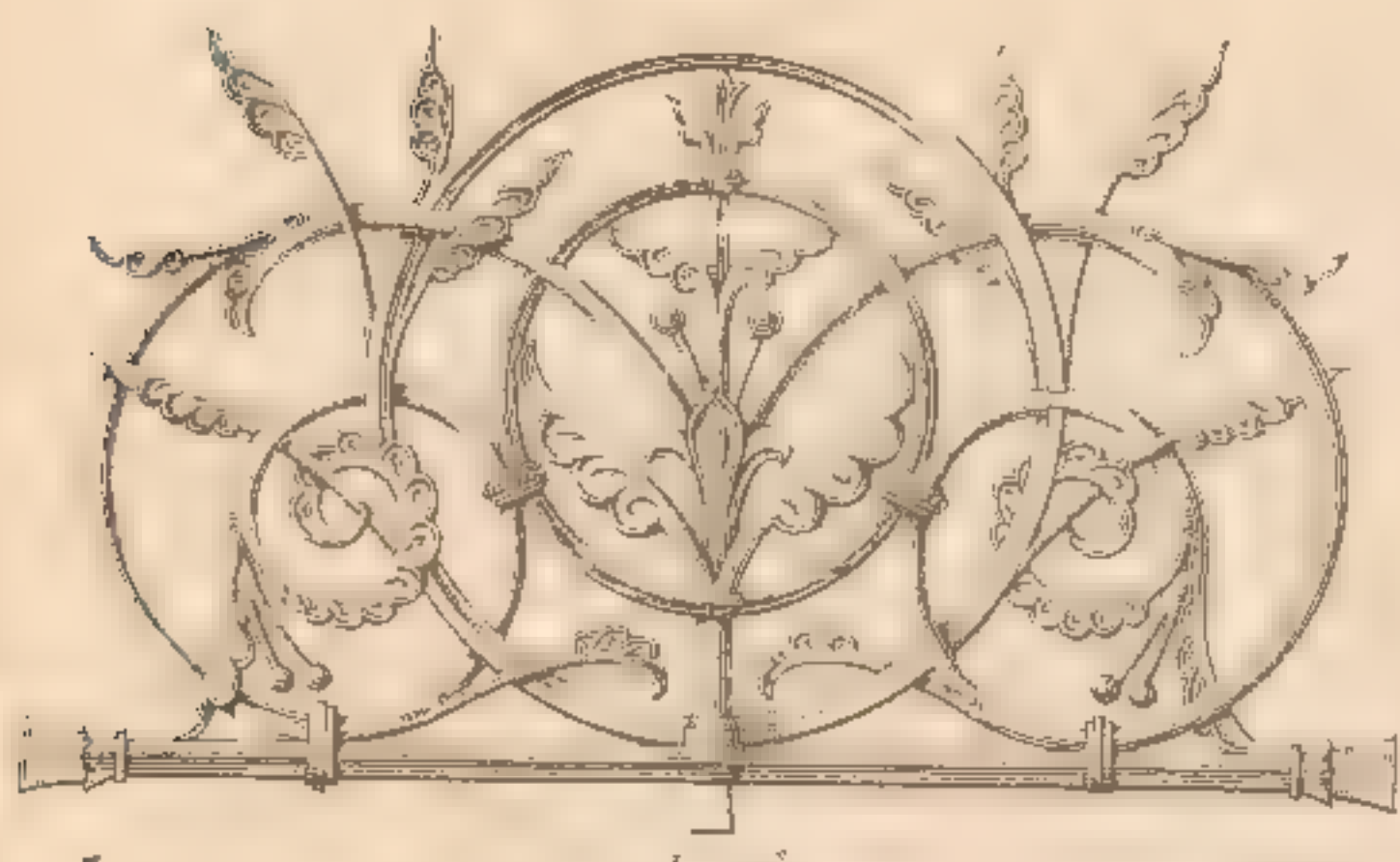
Nº 64



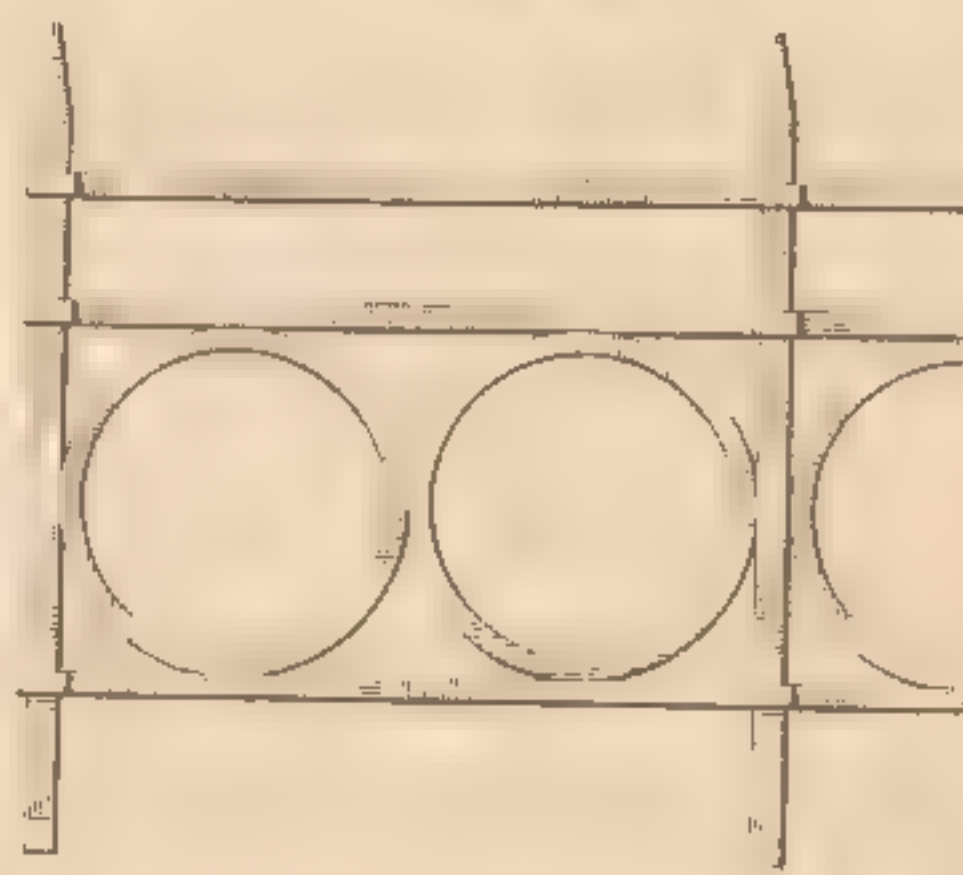
Nº 308



Nº 365



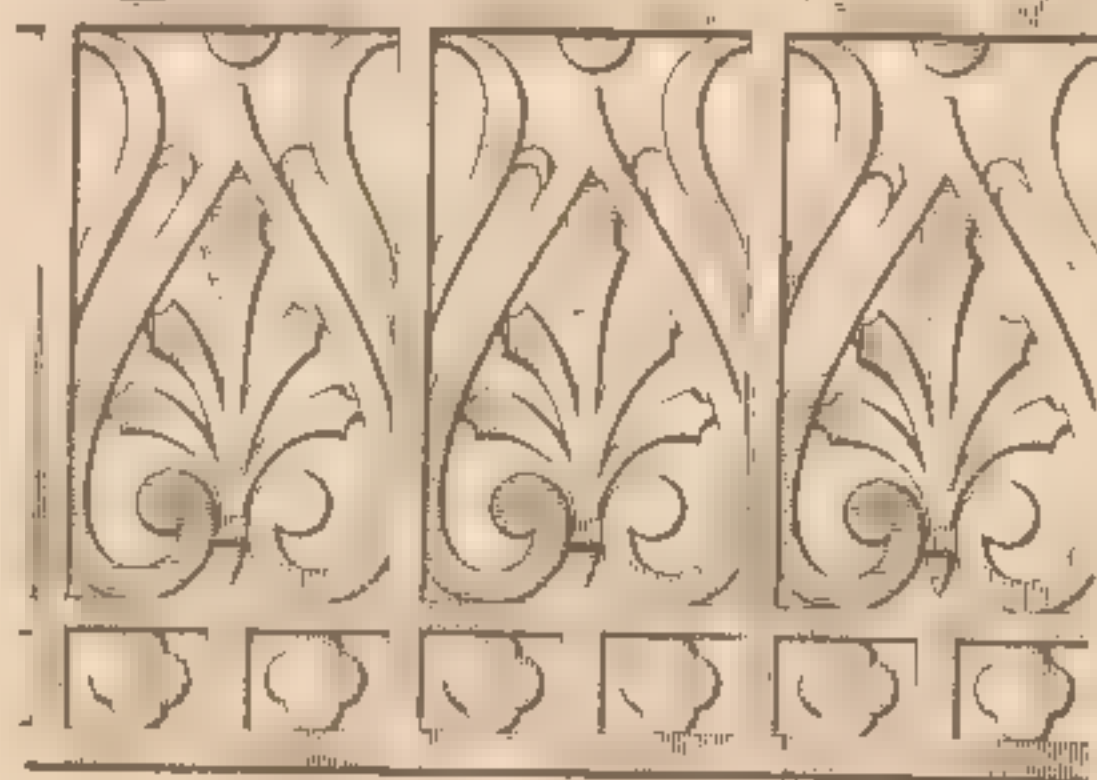
Nº 80



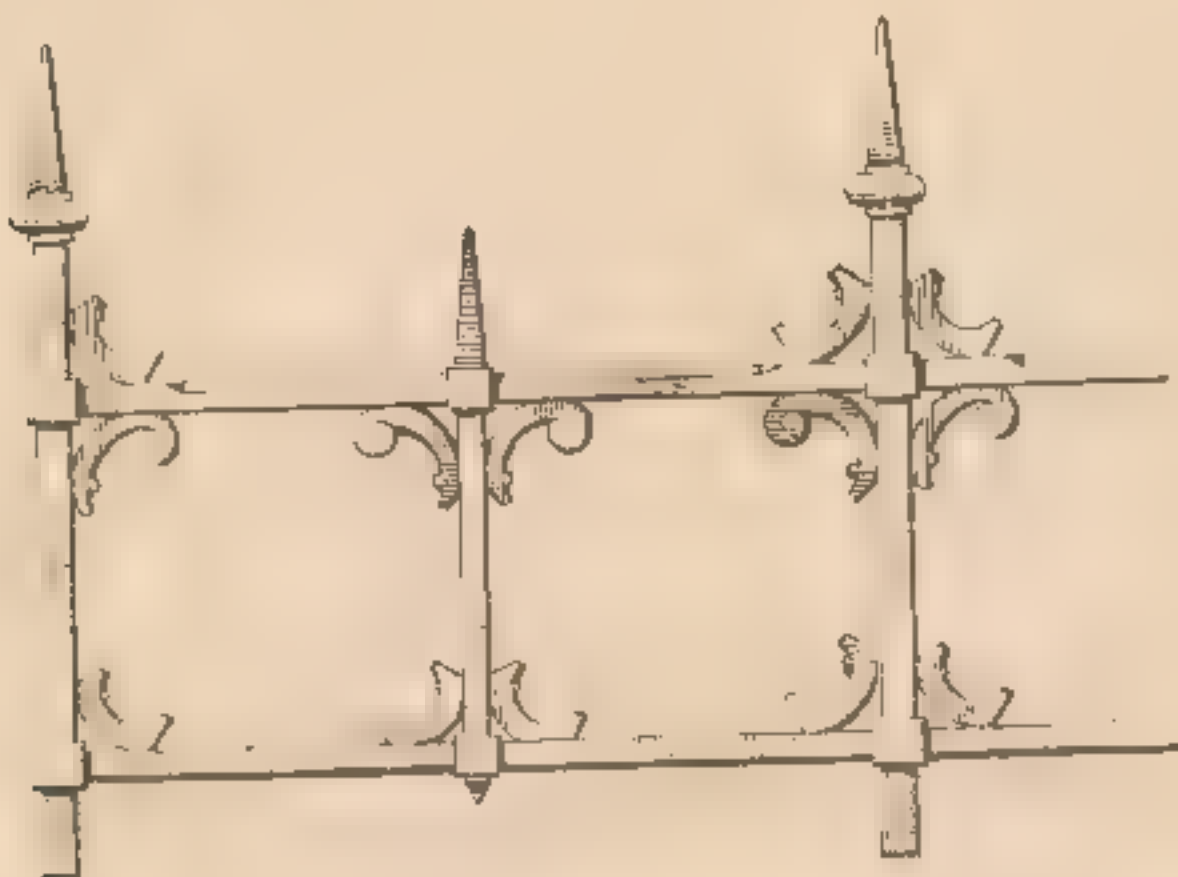
Nº 84



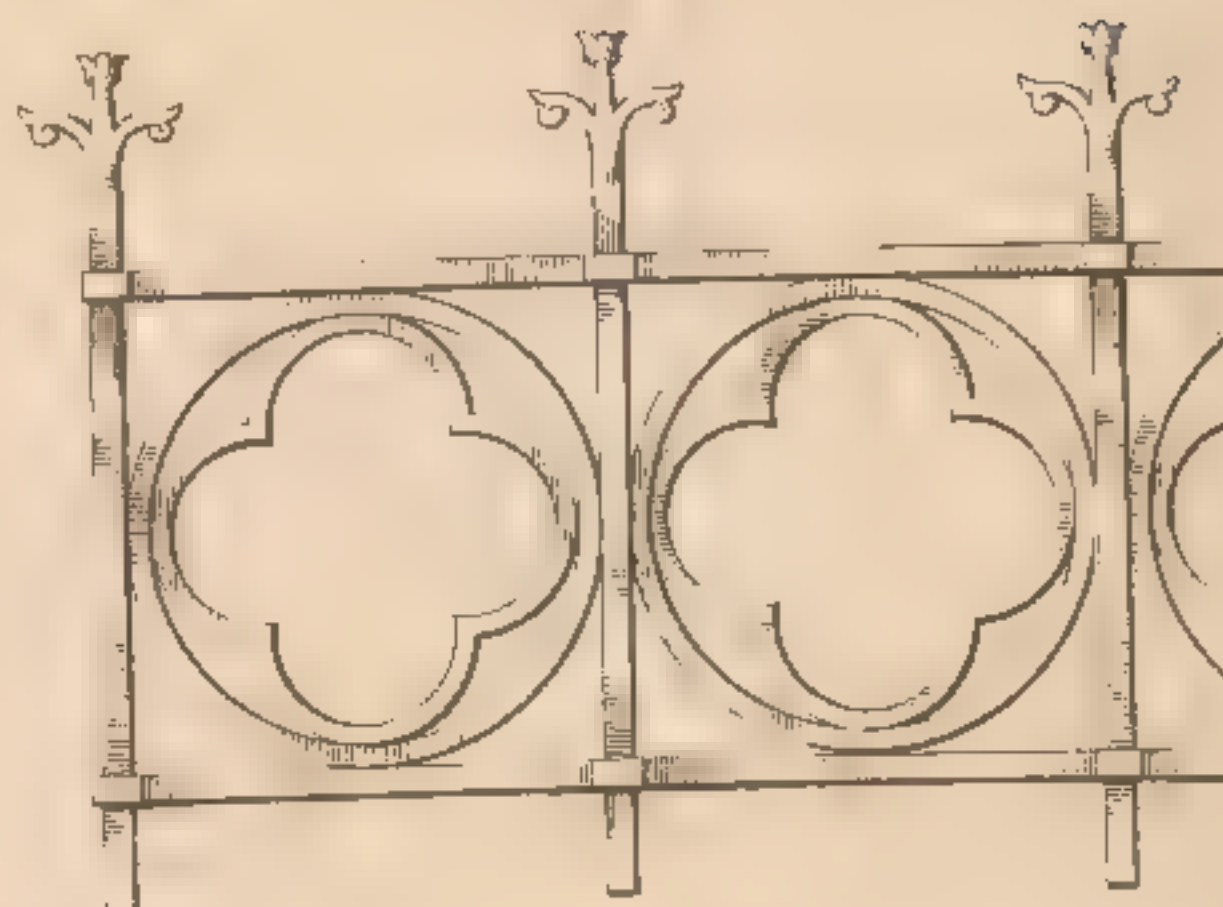
Nº 84



Nº 32



Nº 22



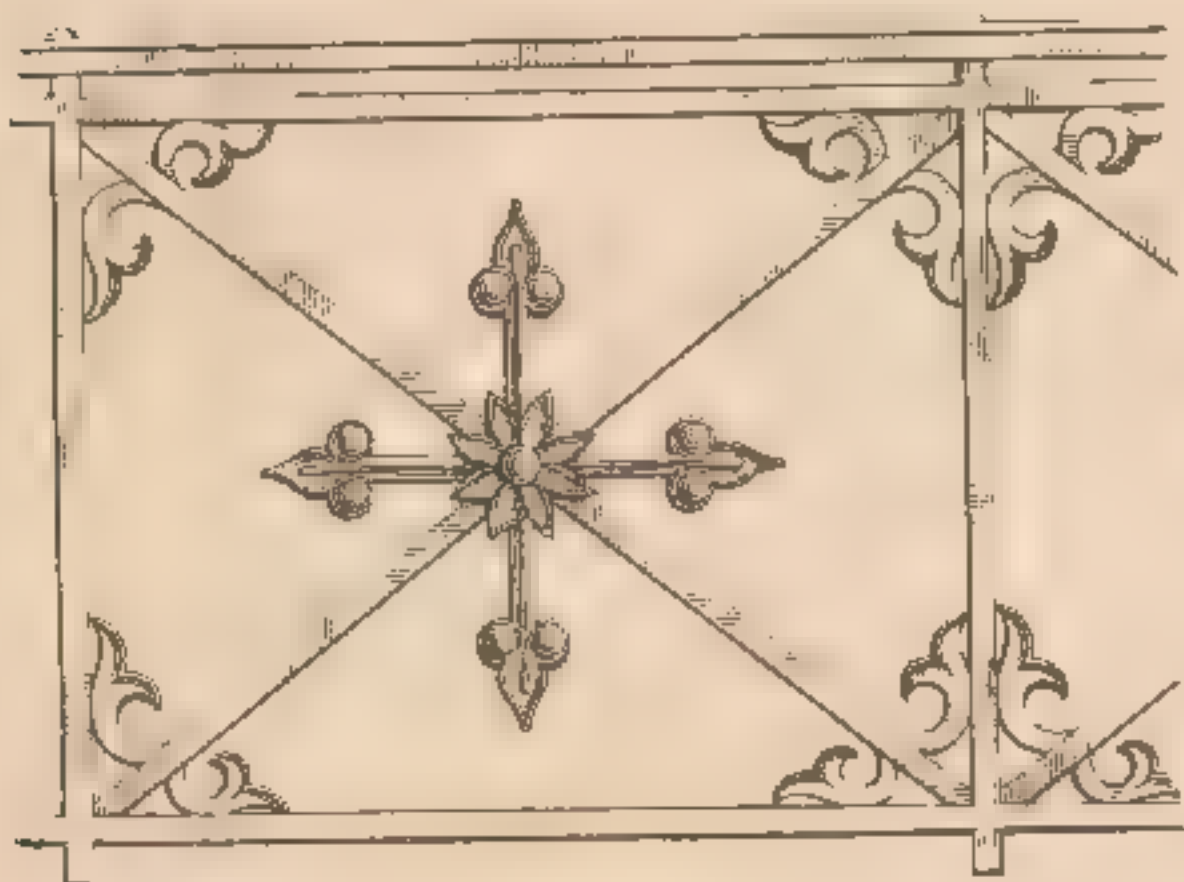
Nº 457



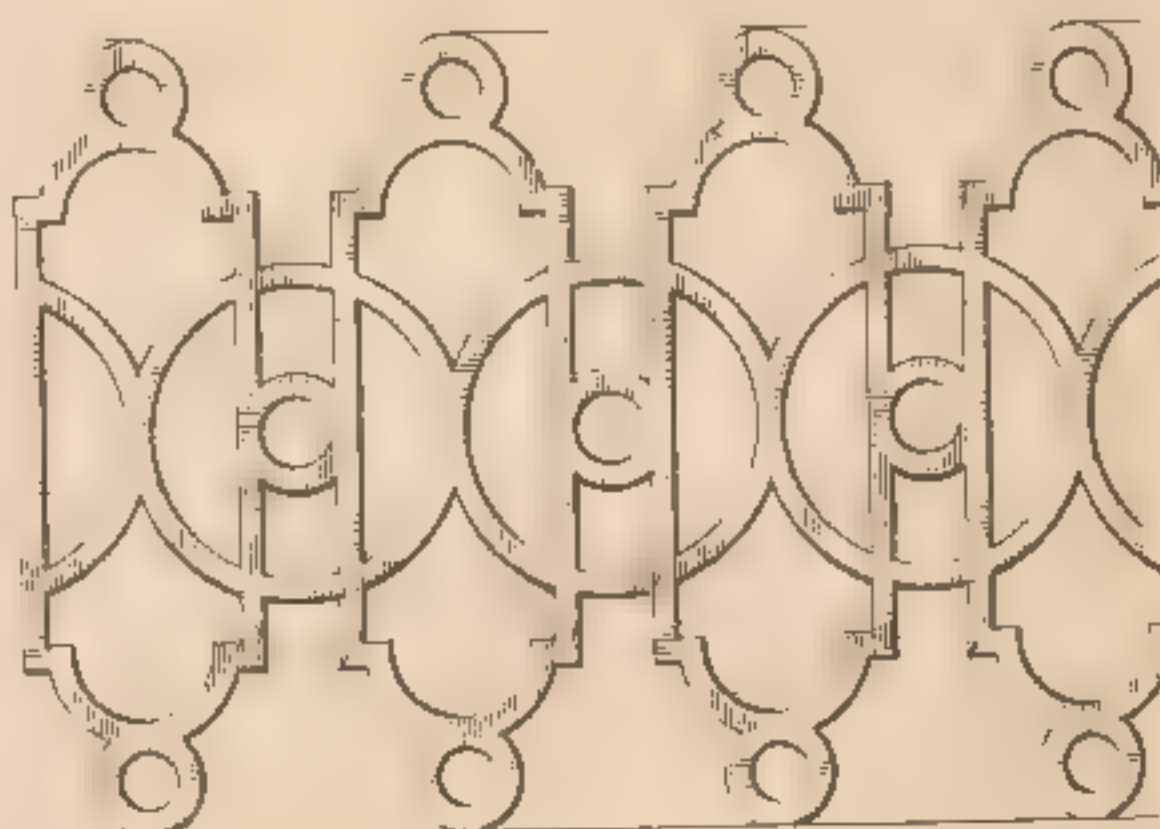
Nº 299



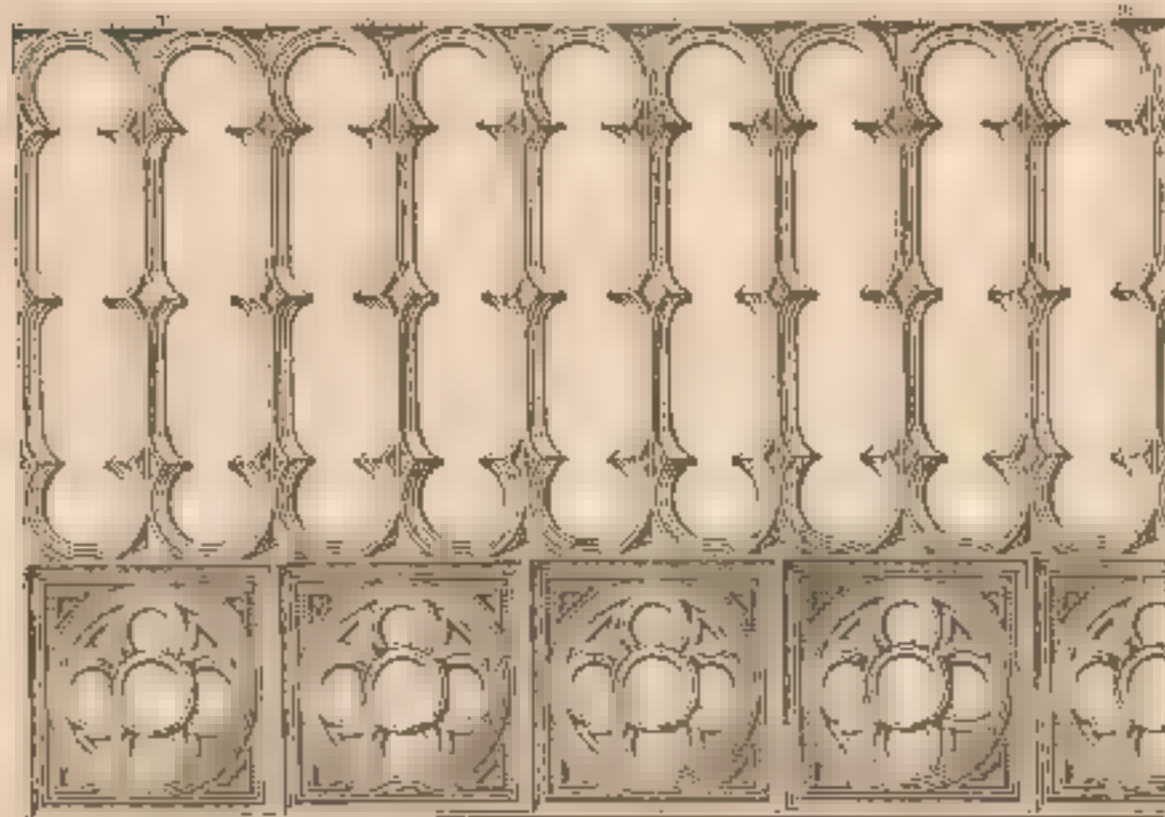
Nº 209



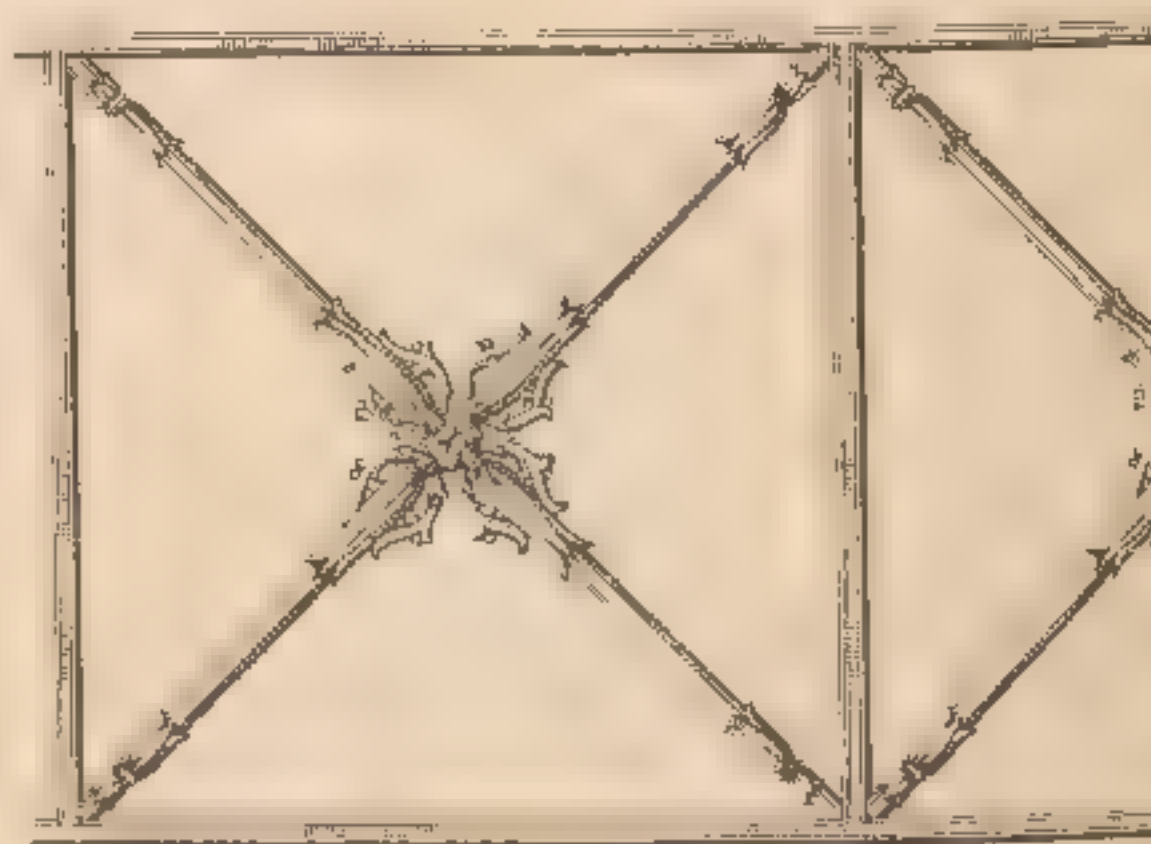
Nº 302



Nº 28



Nº 279



One face

G A E N C H

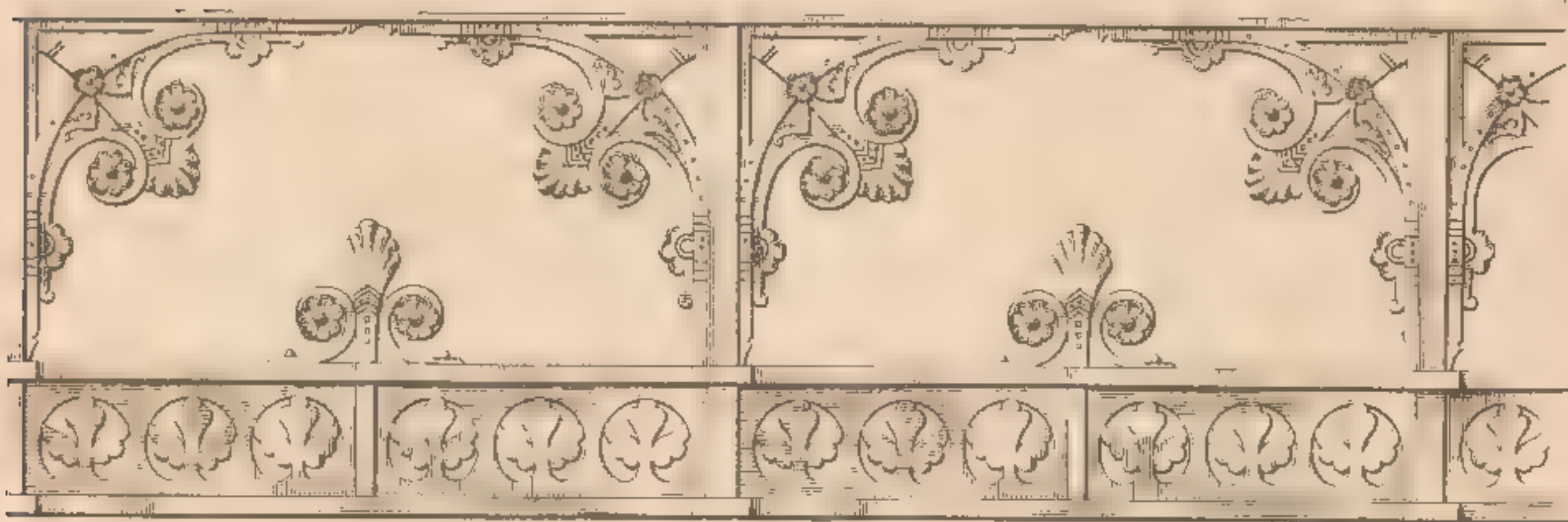
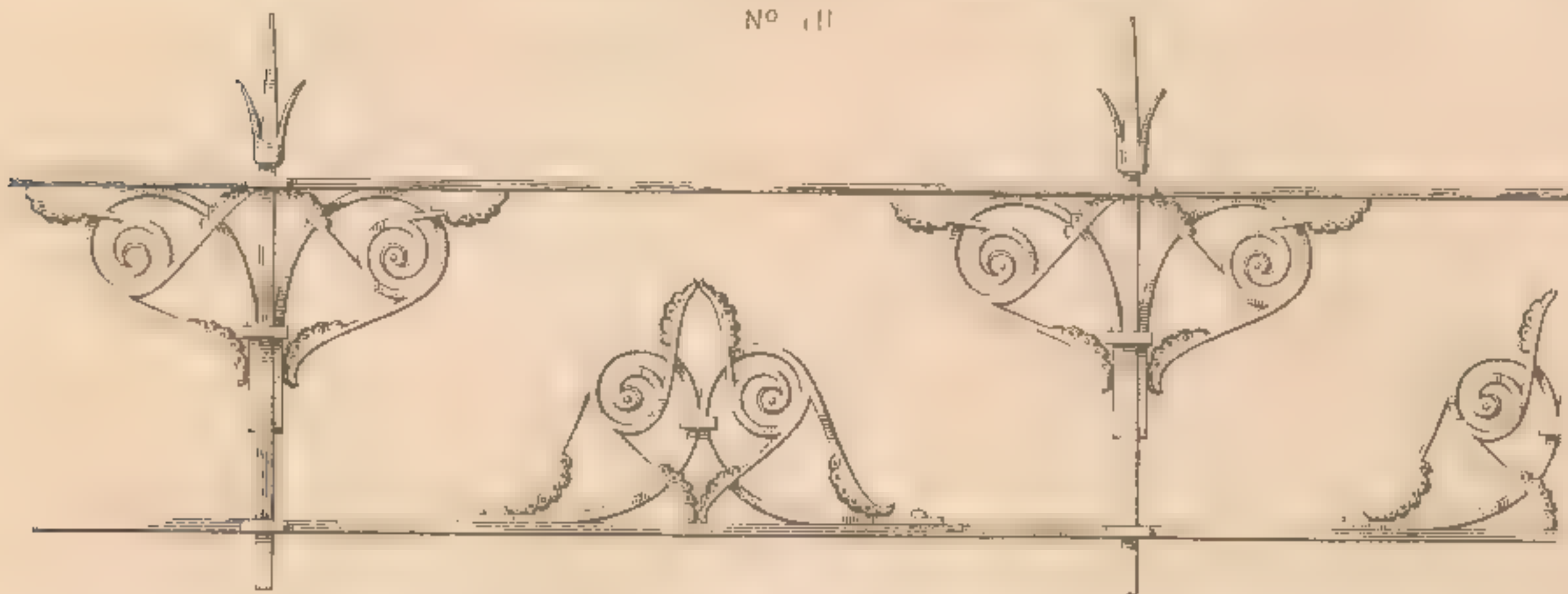
MARFAT LANT. FA. N. 3

Nº 68



Standards ne No. 237 Final 3 o' charged extra

Nº 111



Nº 57



A E

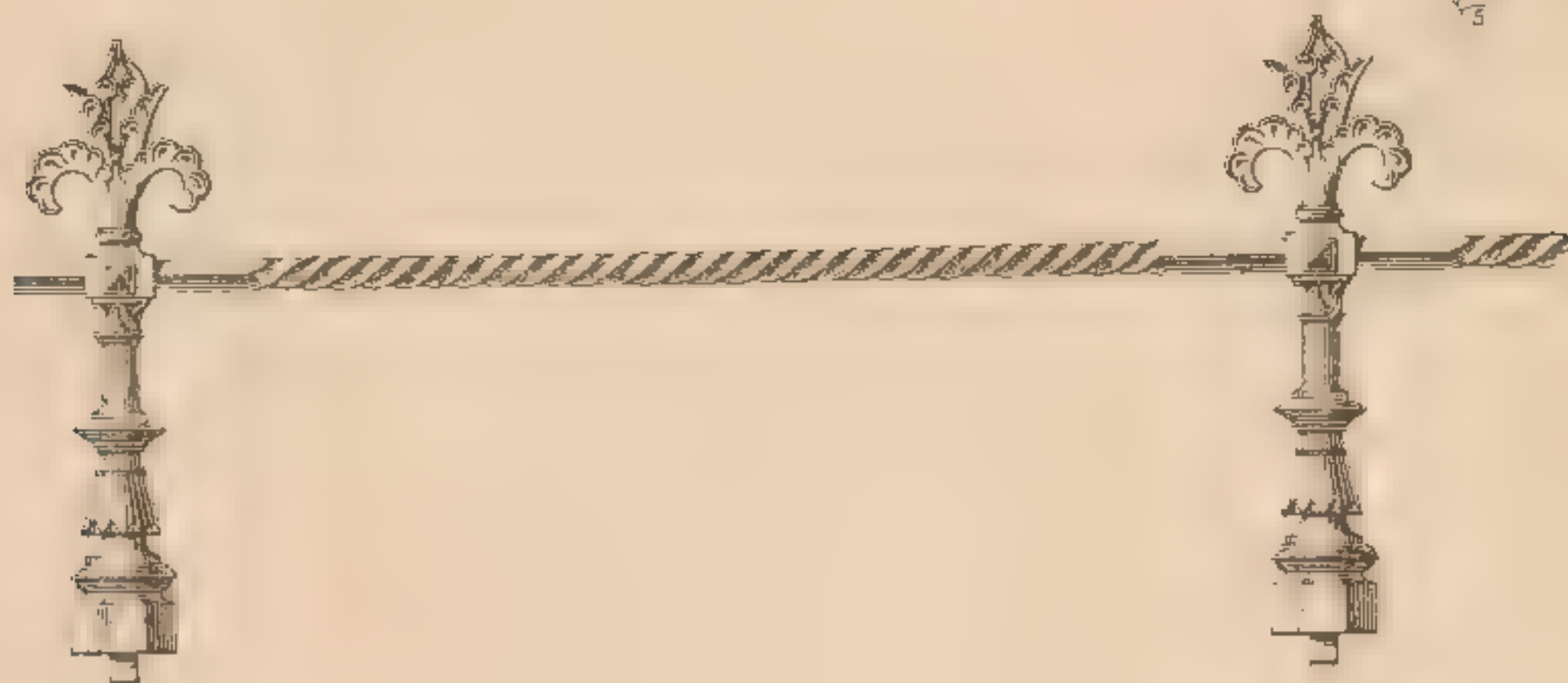
Nº 49



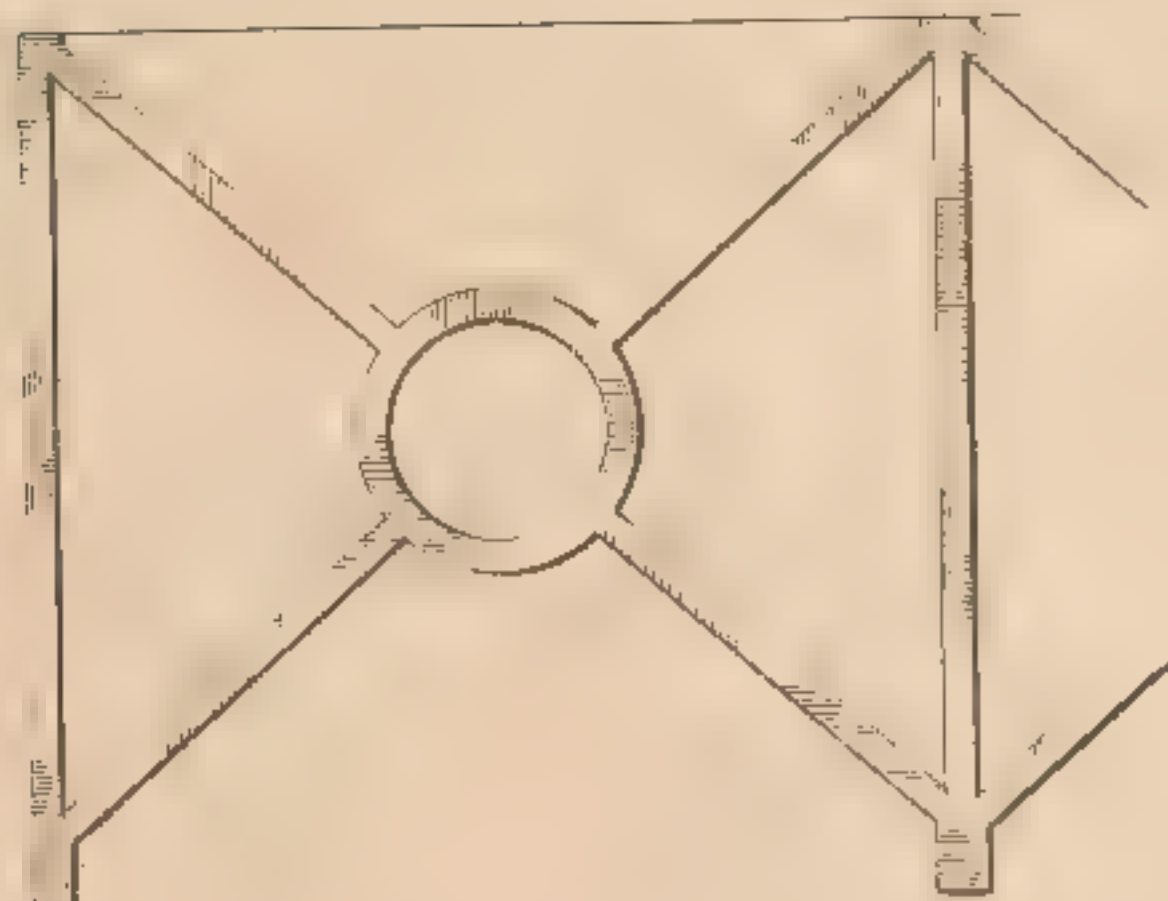
F C 1

MACFARLANE'S RAILING & C

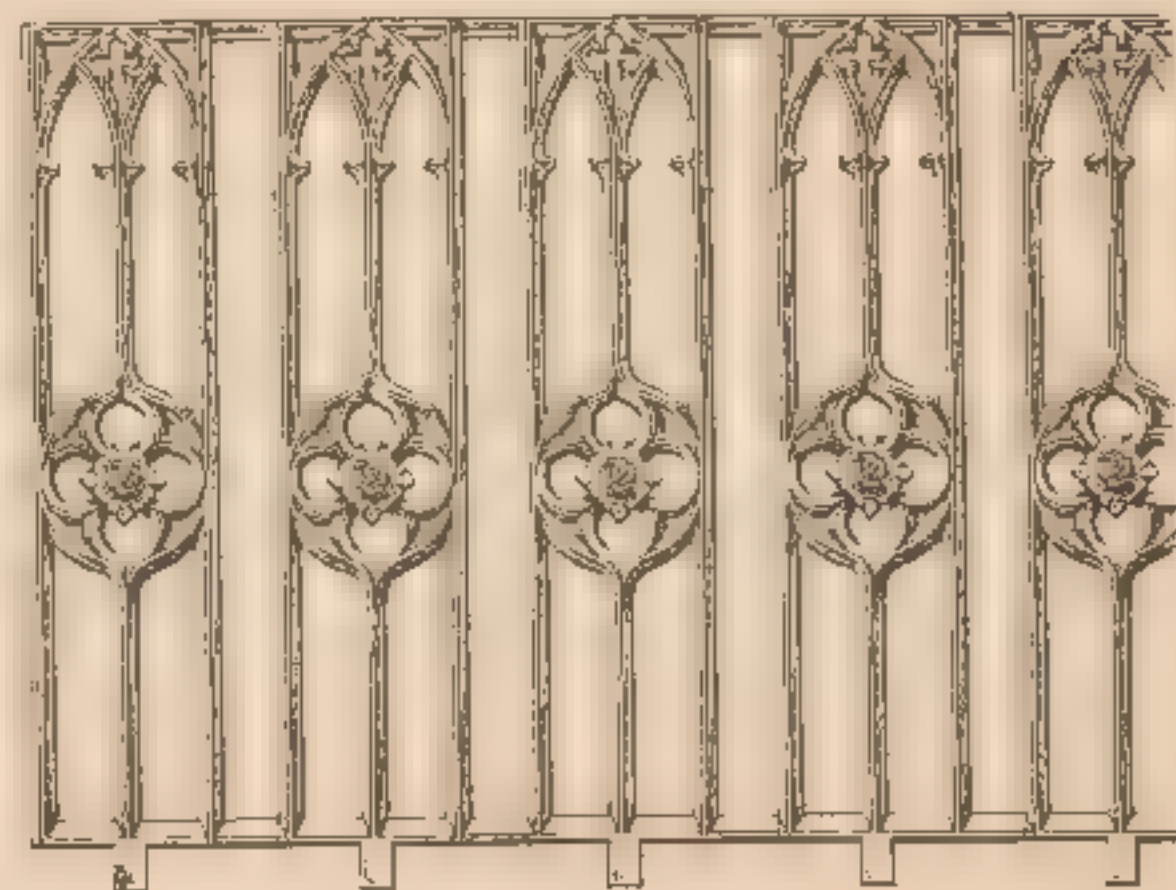
No 42



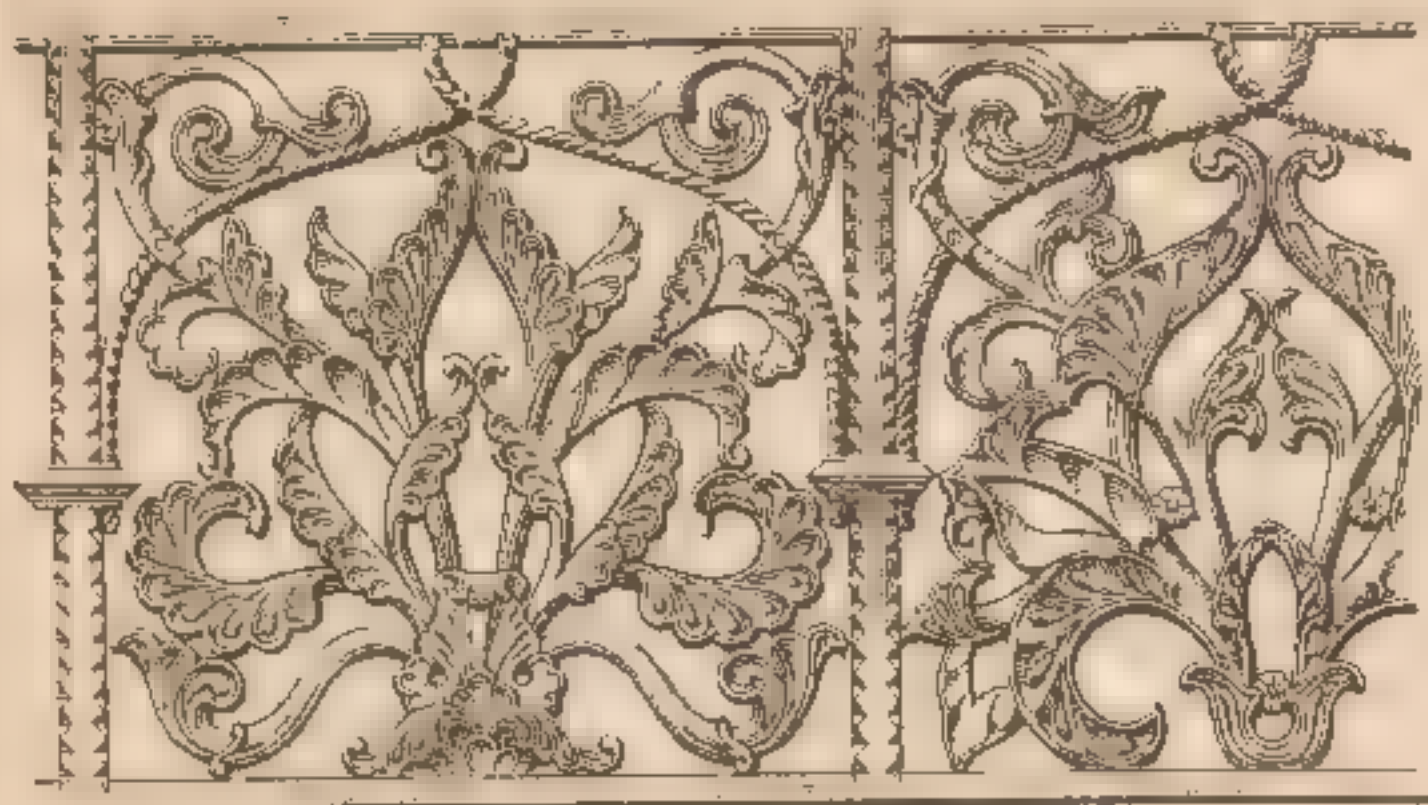
No 409



No 374



No 36

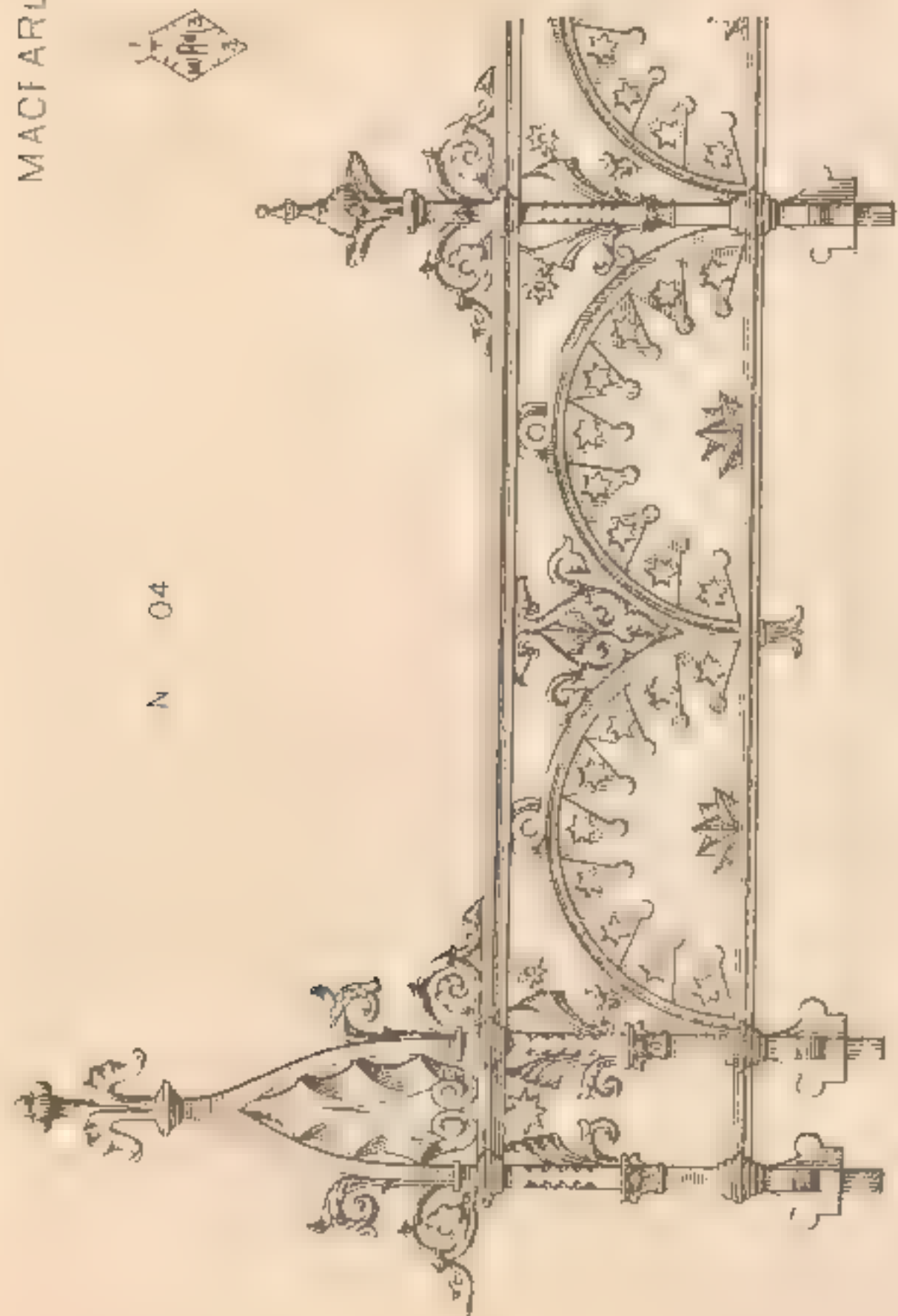


No 57



SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING & CO



N 04

No 210

Standards (see No. 94 Terminal 3' 2" charged extra.



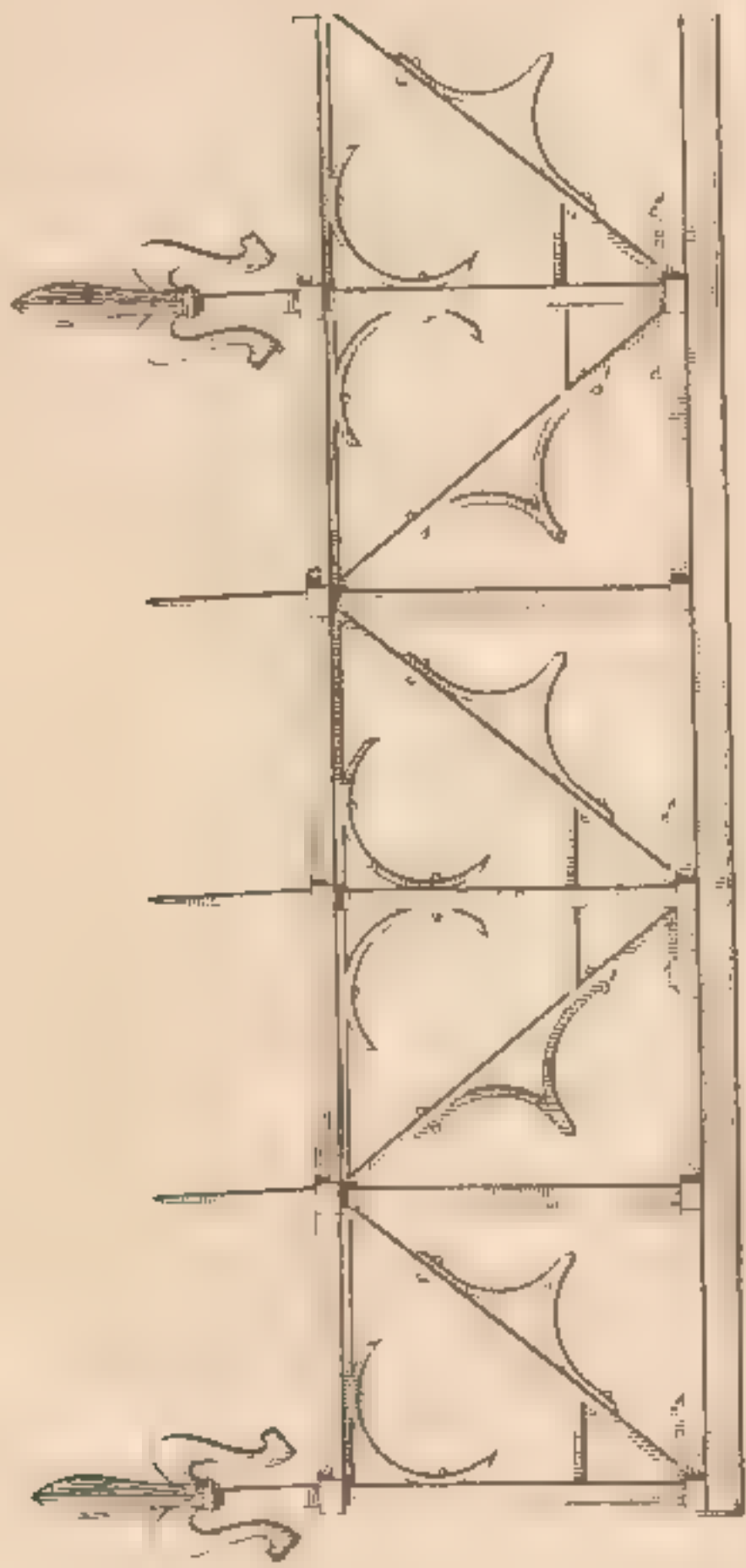
No 33



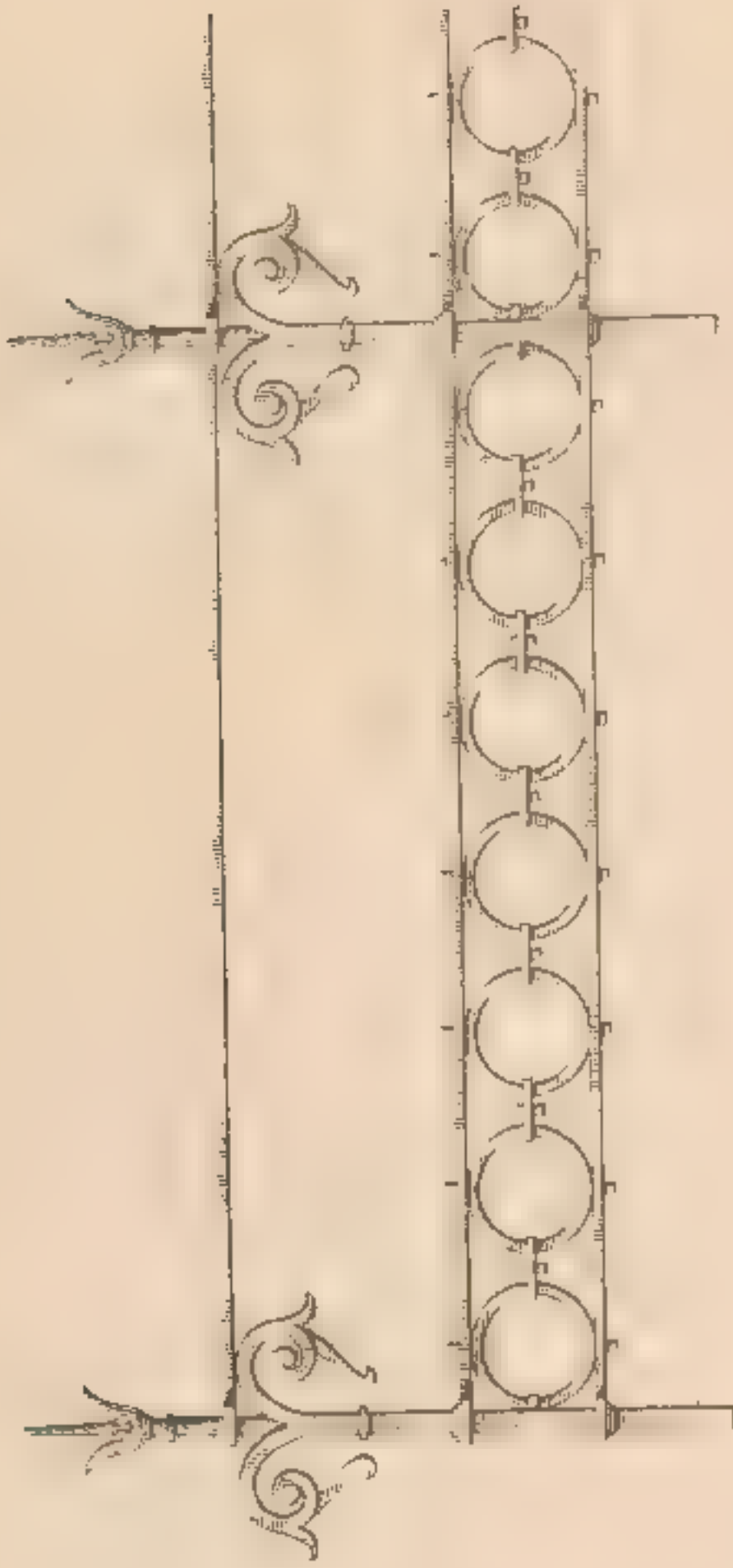
SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING &c

N^o 2



N^o 206



N^o 26 8 0" between centres

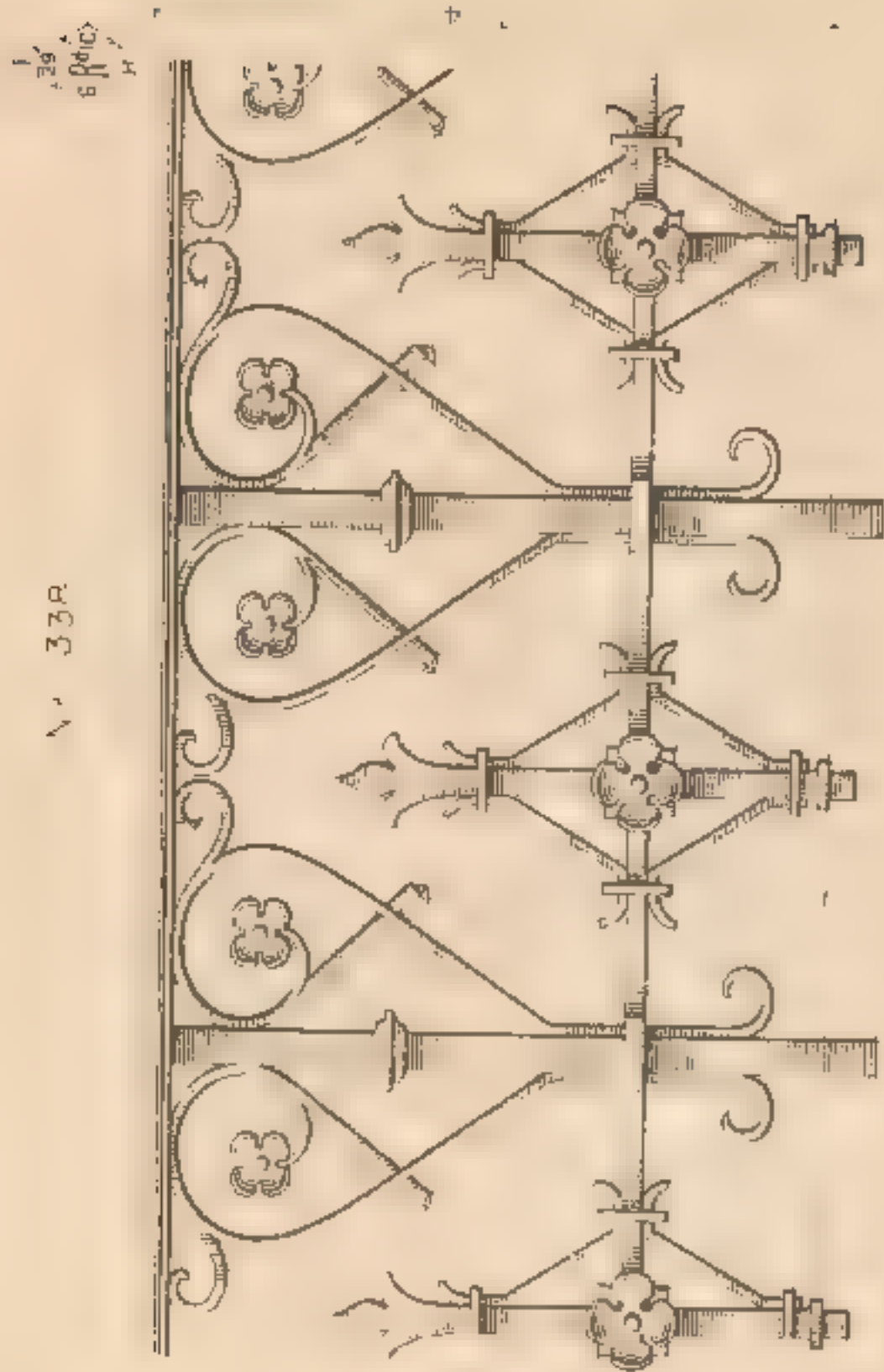


SCALE IN FEET

N° 26 4' 10" between centres



N° 33 R



N° 27 3' 2" between centres



N° 28 3' 2" between centres



*1A)FAH H¹ 4¹ 8

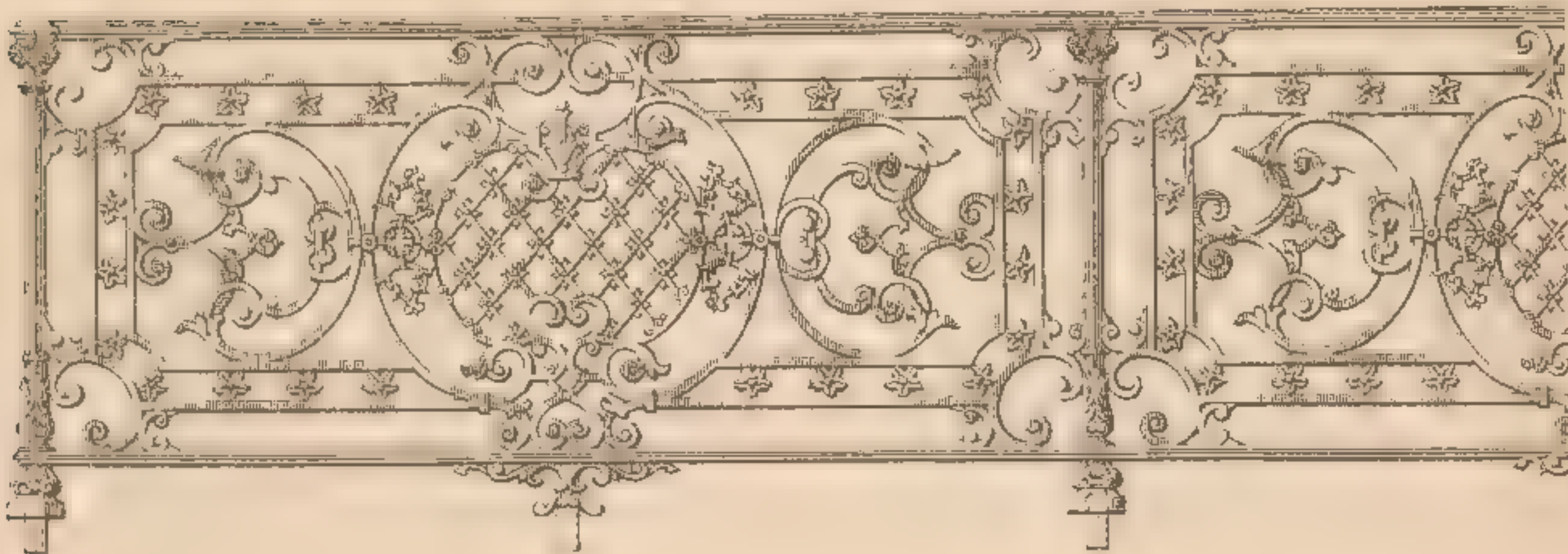
N^o 79

1
0
A. H. 11
5



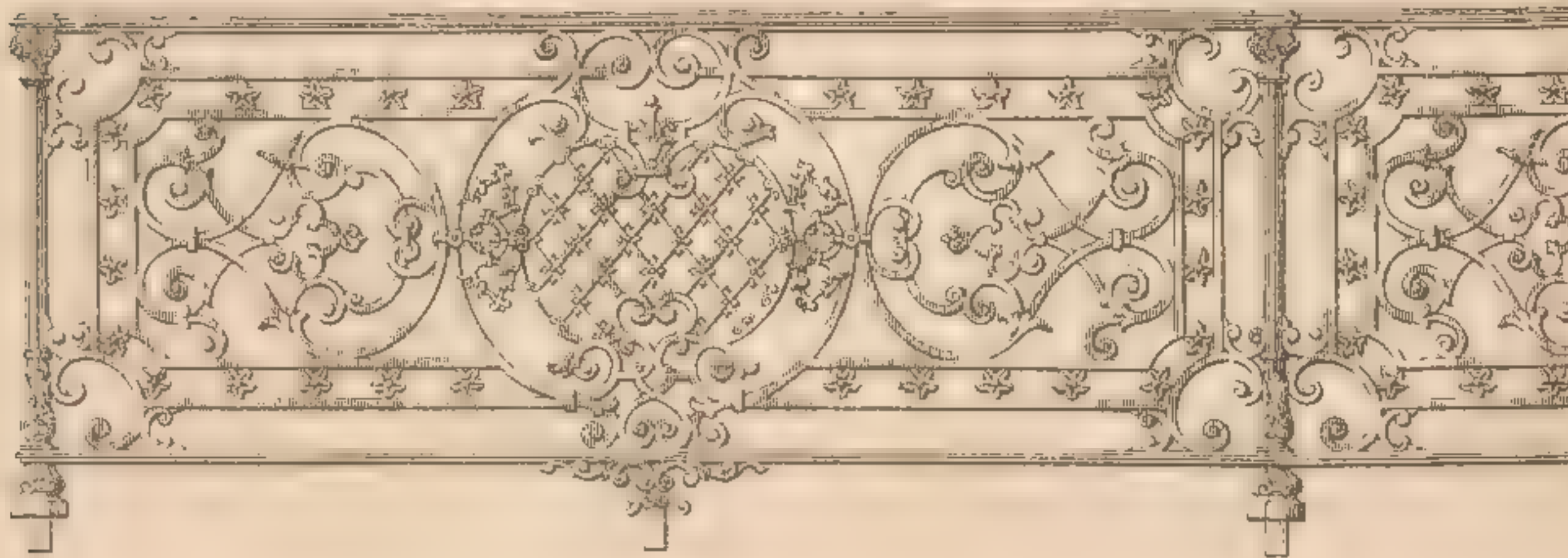
N^o 42 5' 0" between centres

3/4
8



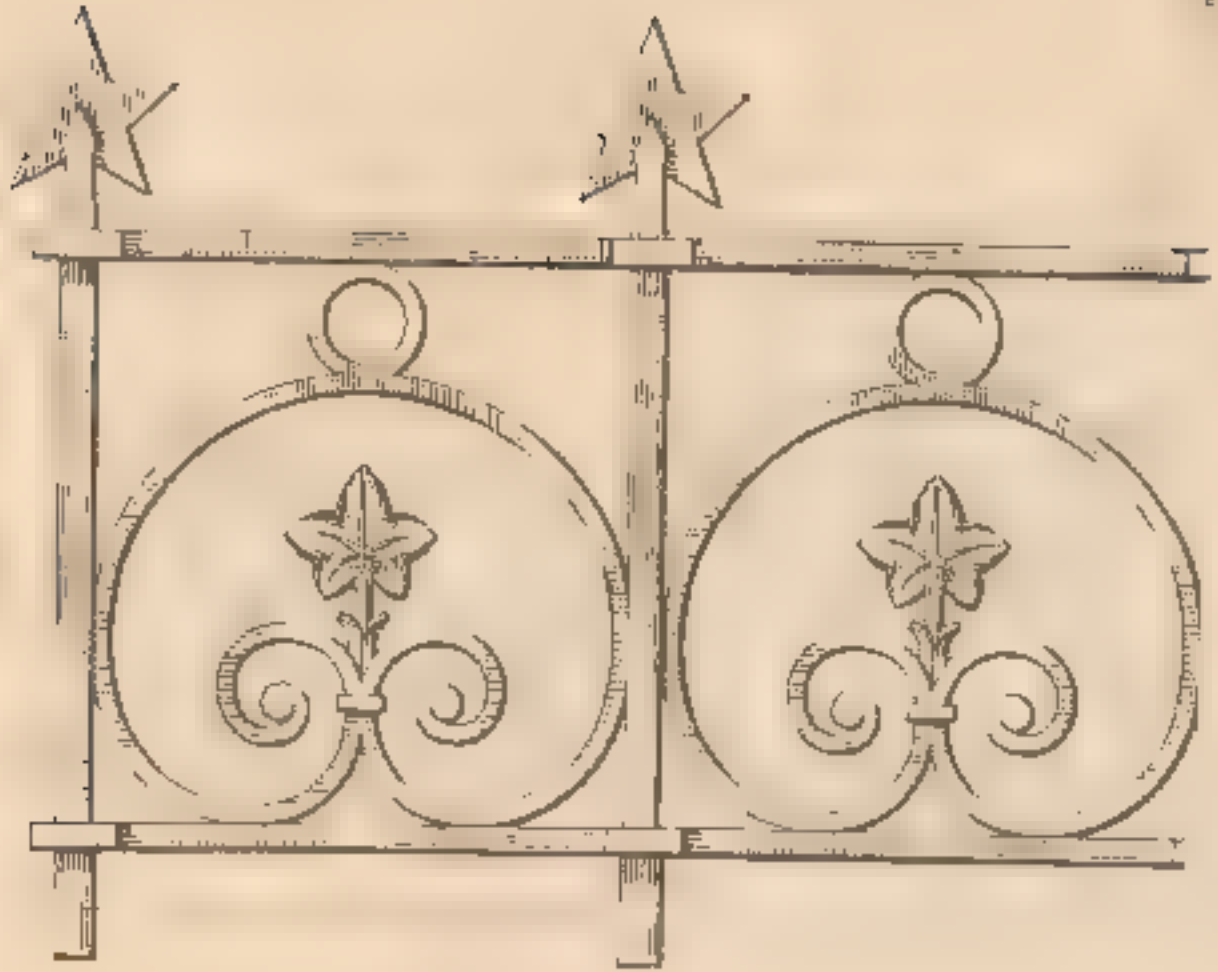
N 4 5' 10" between centres

3/4
8



M. A. FARLANE'S RAILING

Nº 207



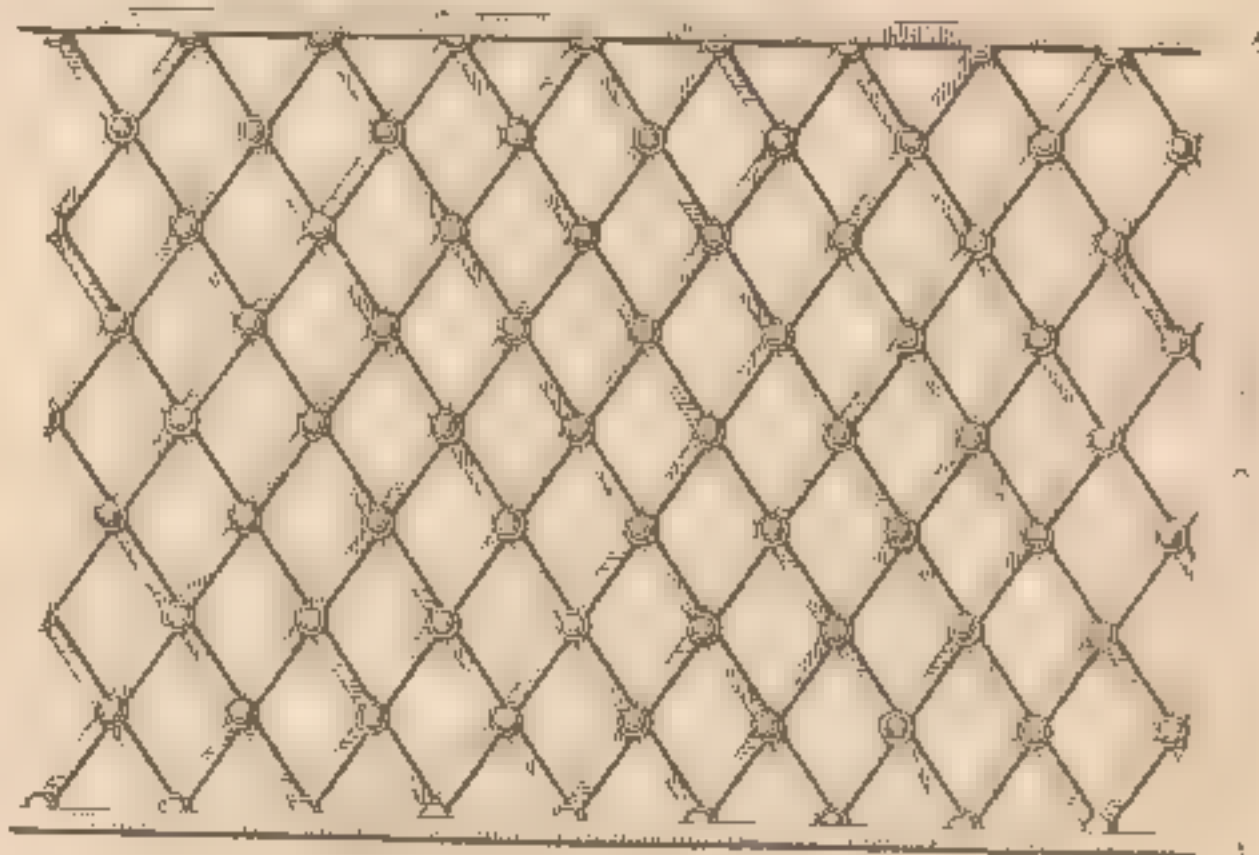
Nº 57



Nº 84



Nº 398

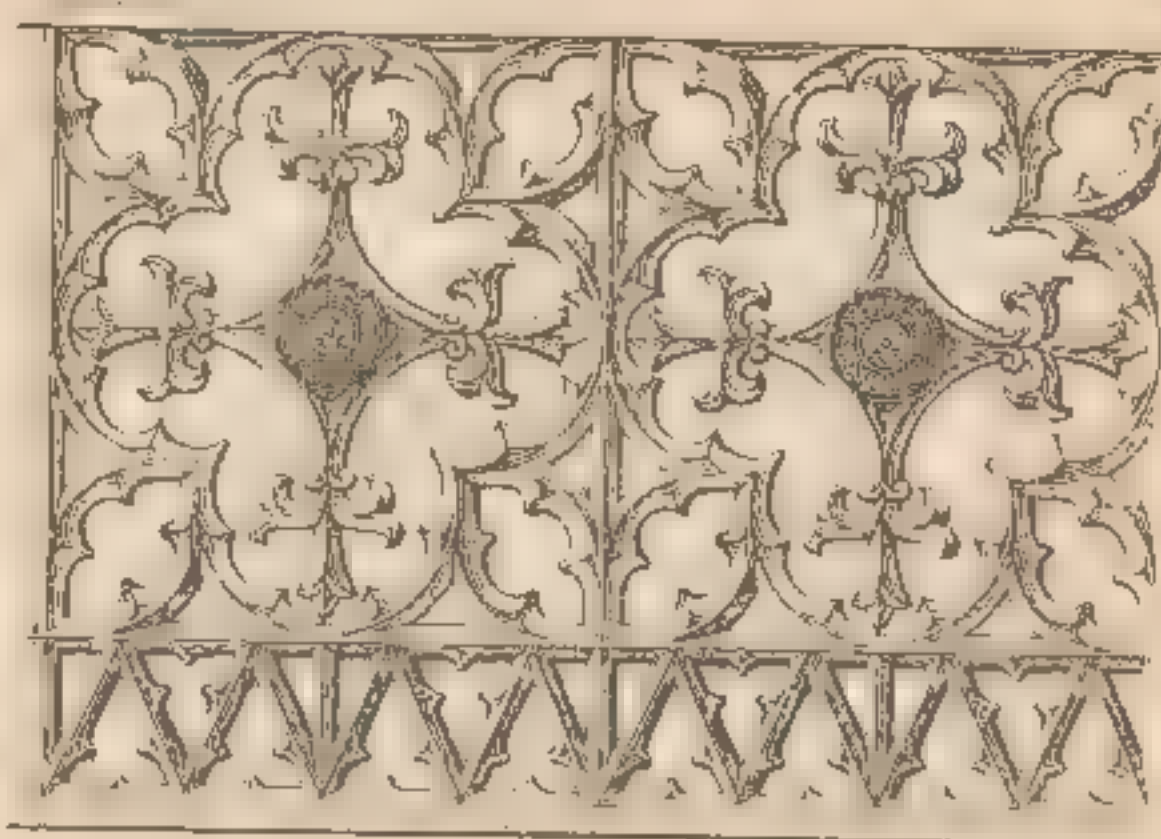


One five

Nº 83

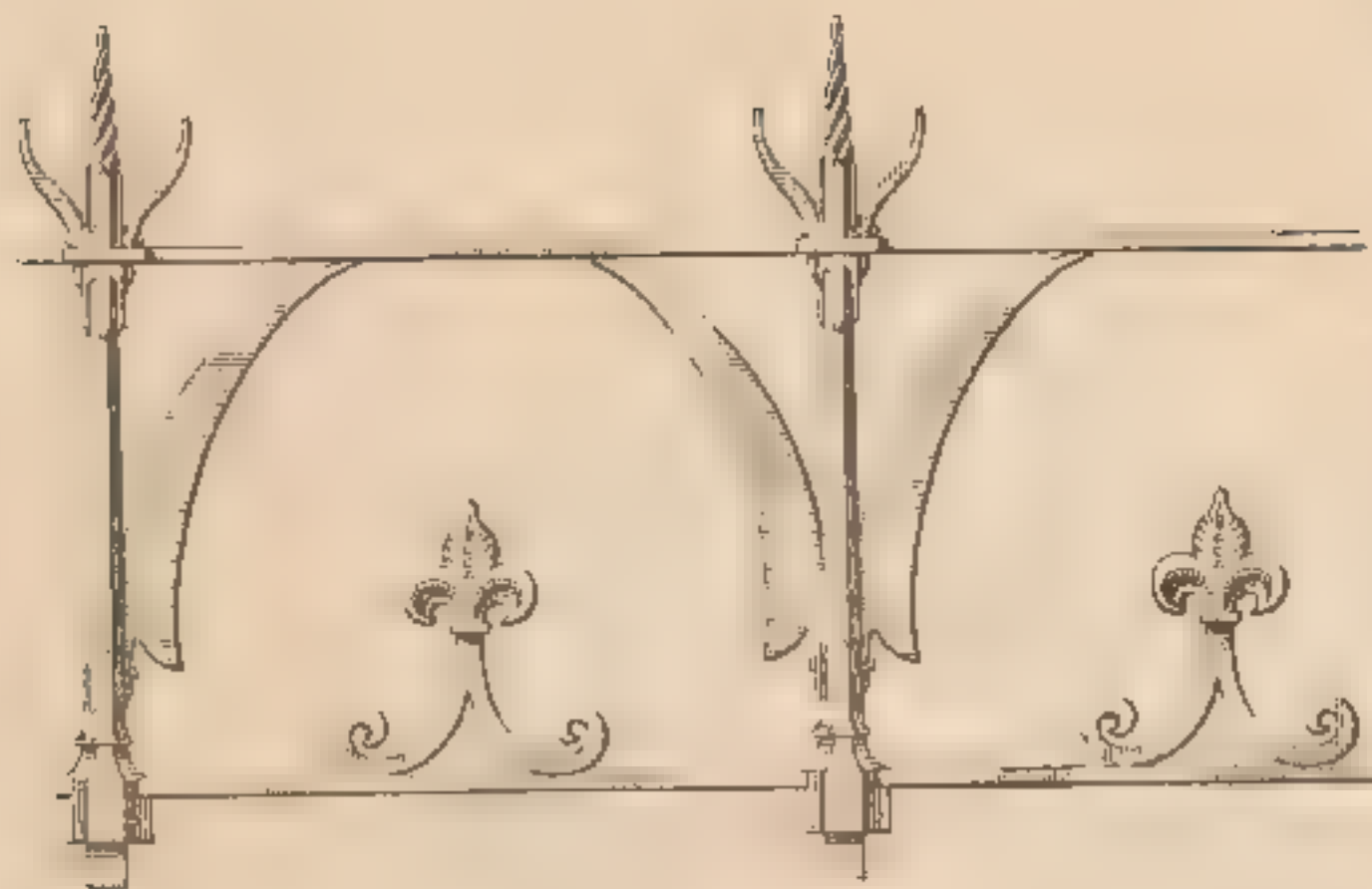


Nº 76

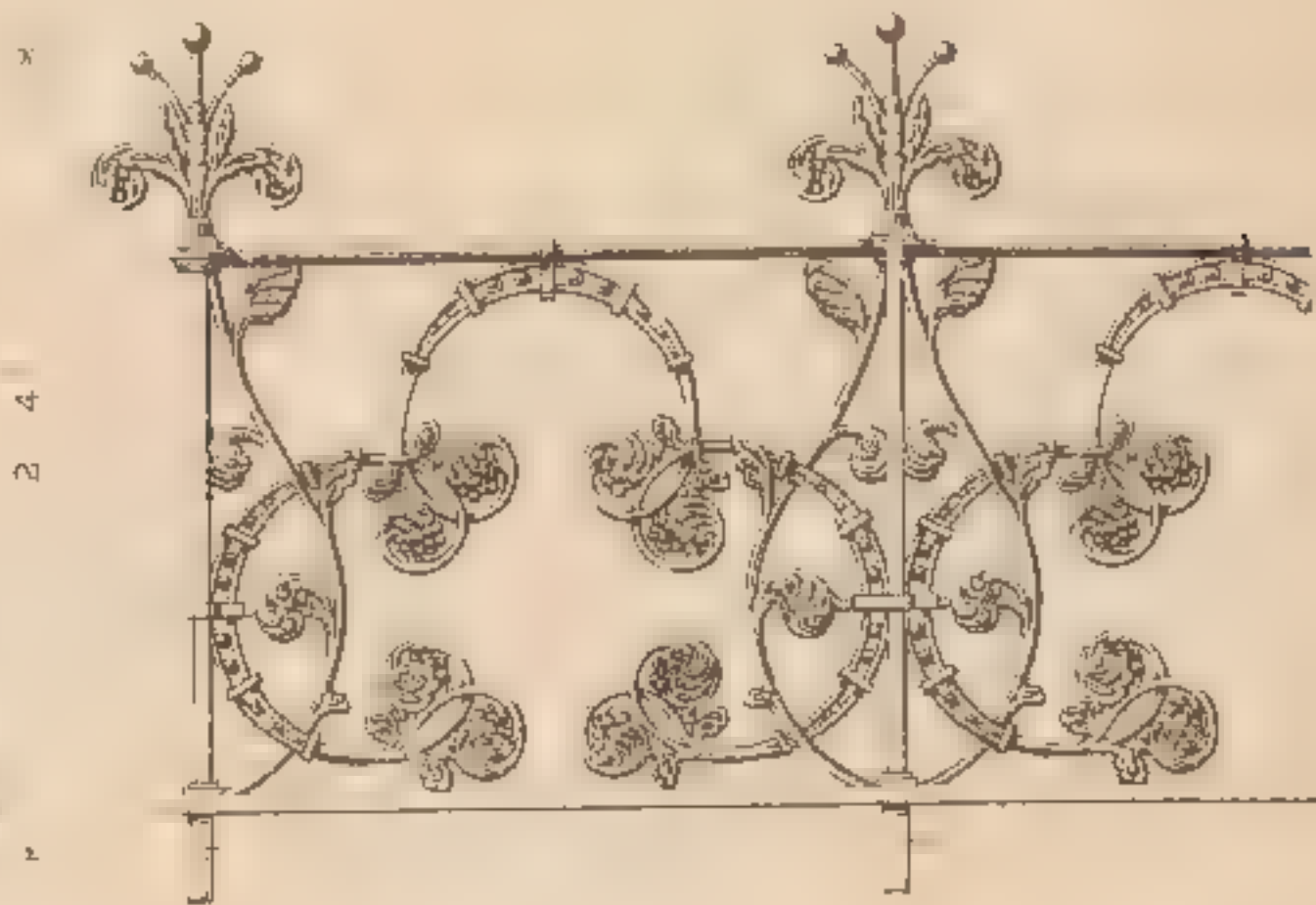


MACFARLANE'S RAILING & CO

Nº 135



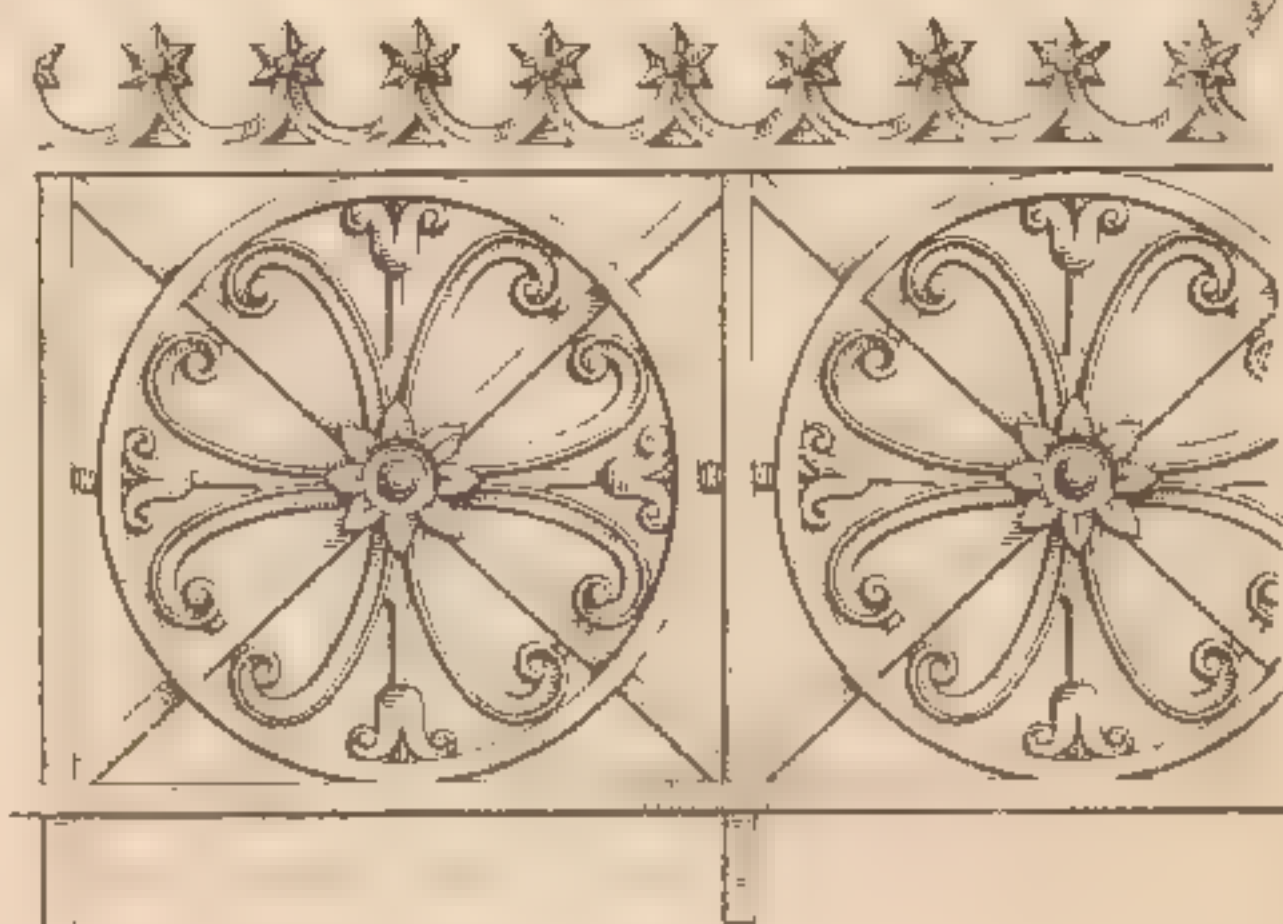
Nº 45



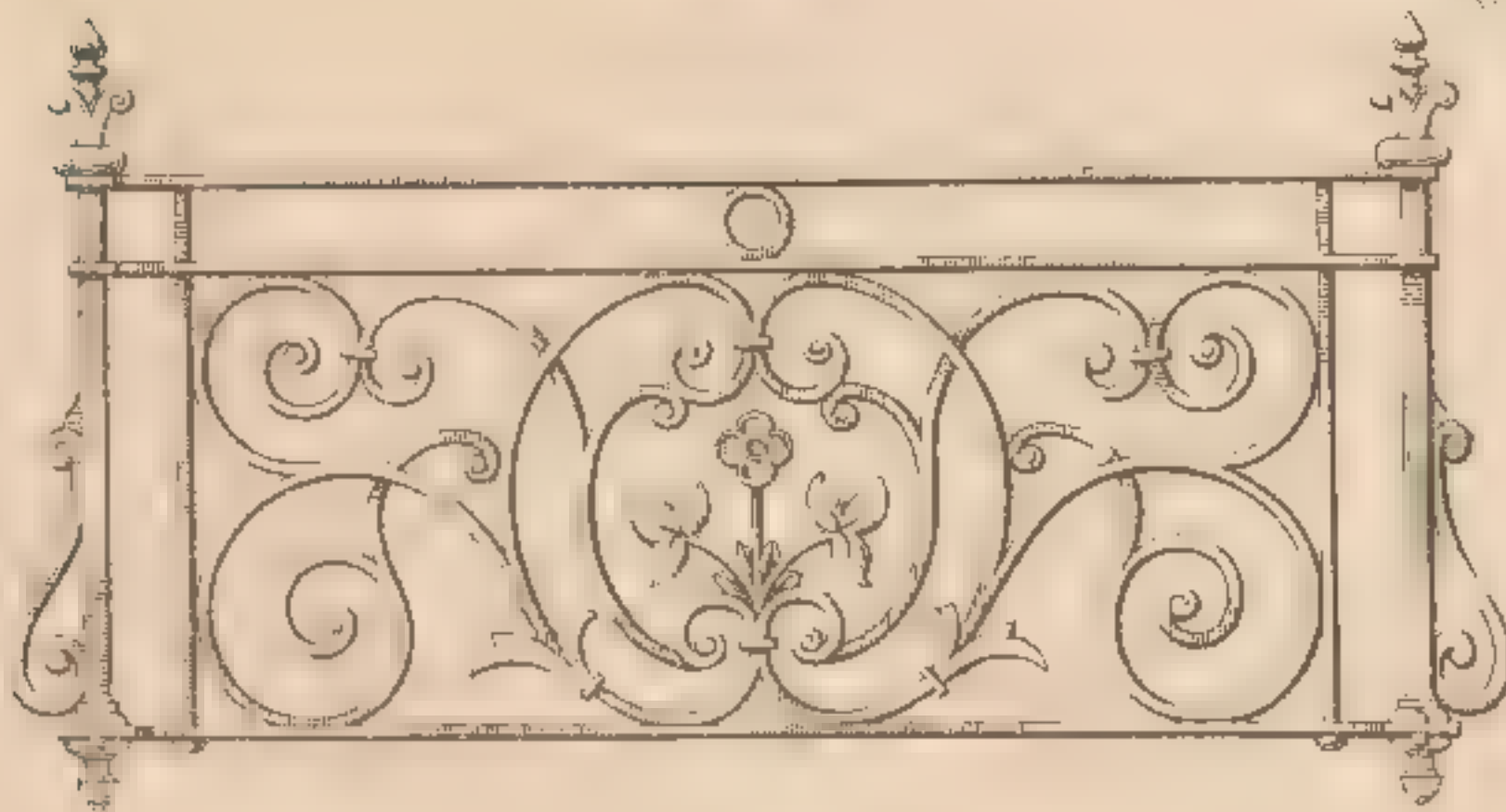
Nº 57



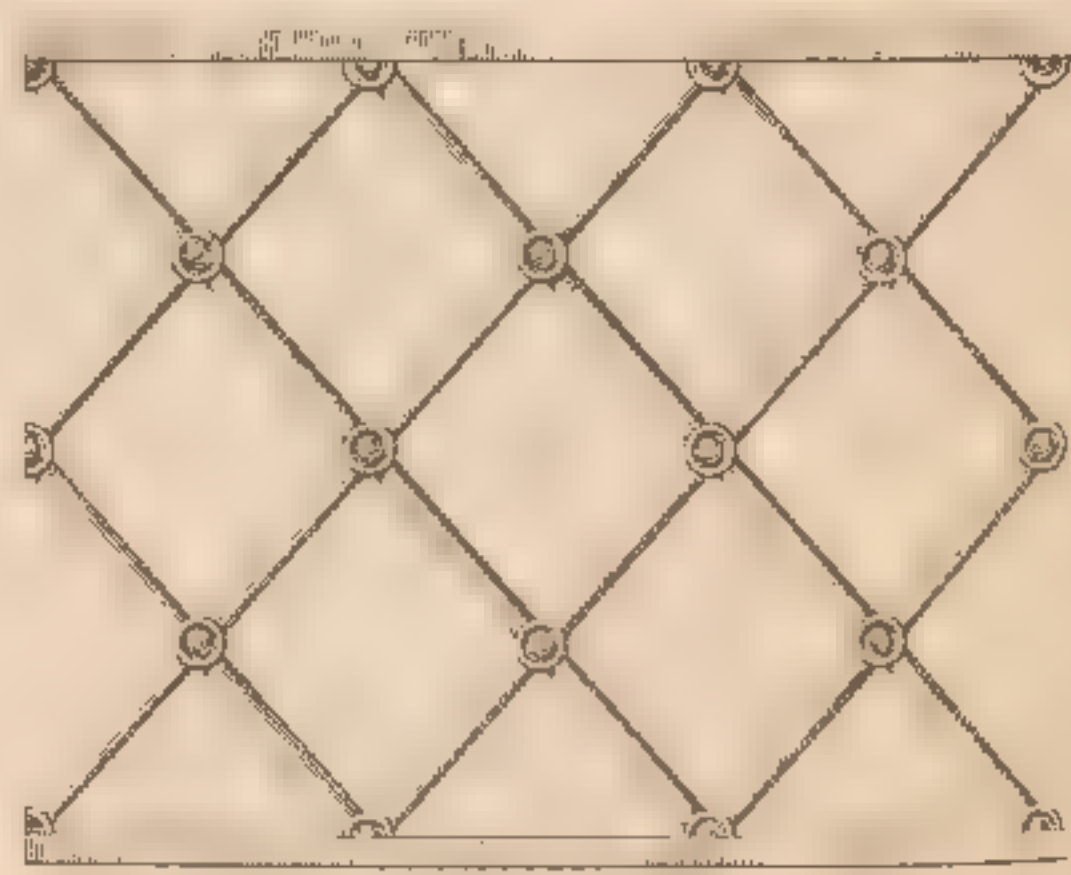
Nº 132



Nº 200



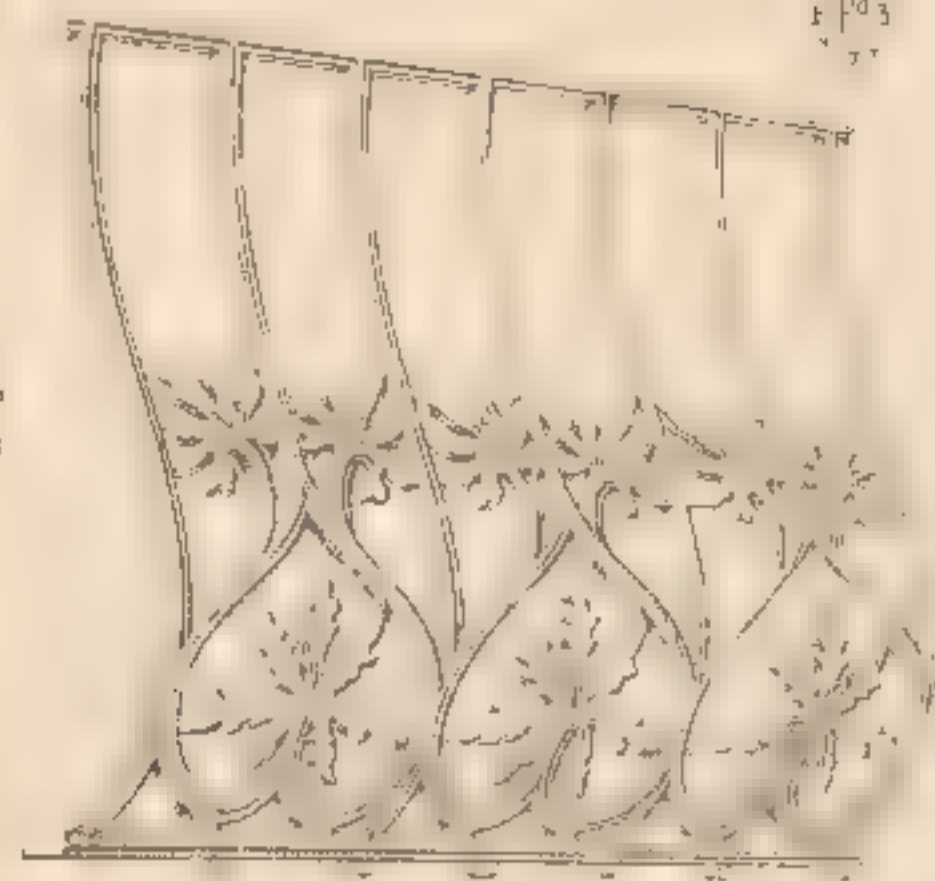
Nº 420



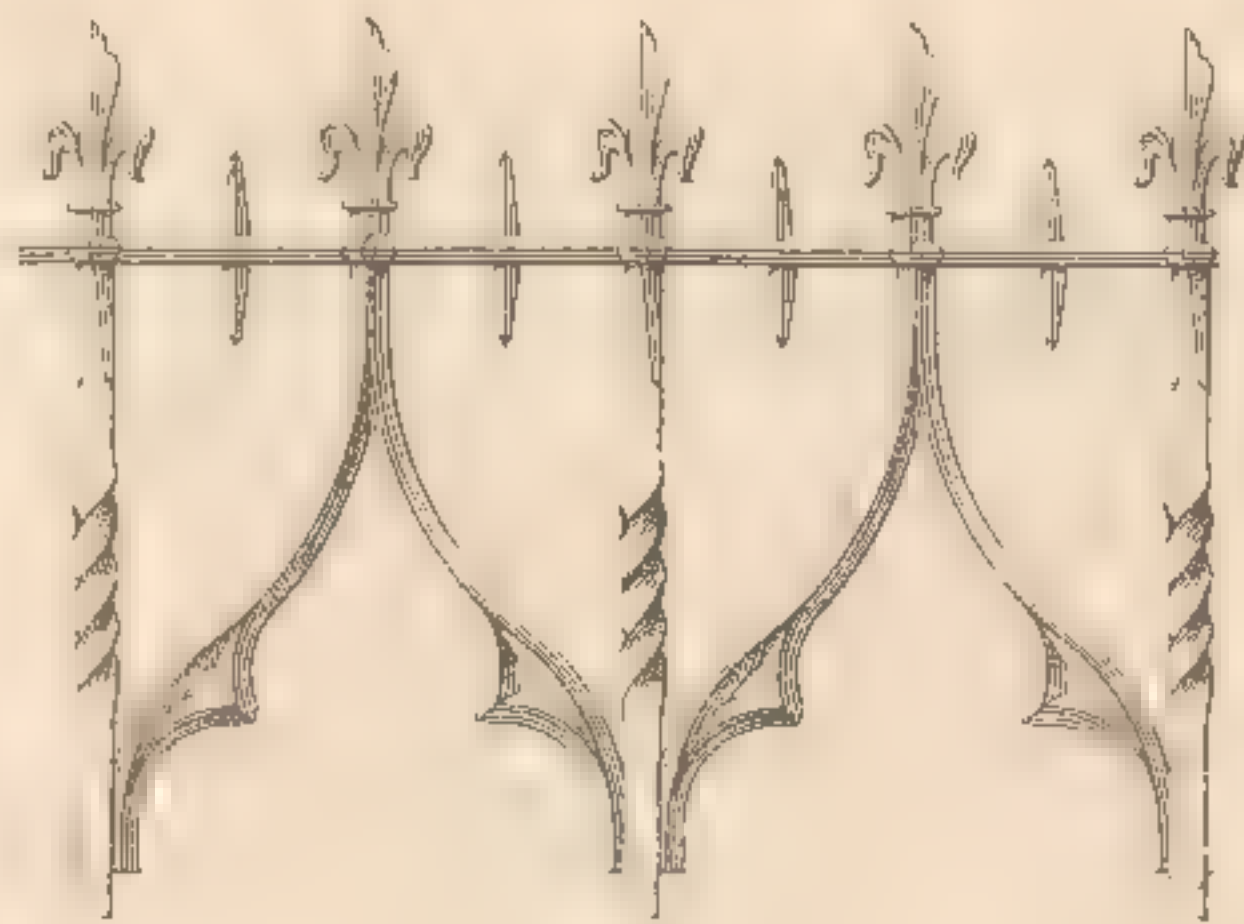
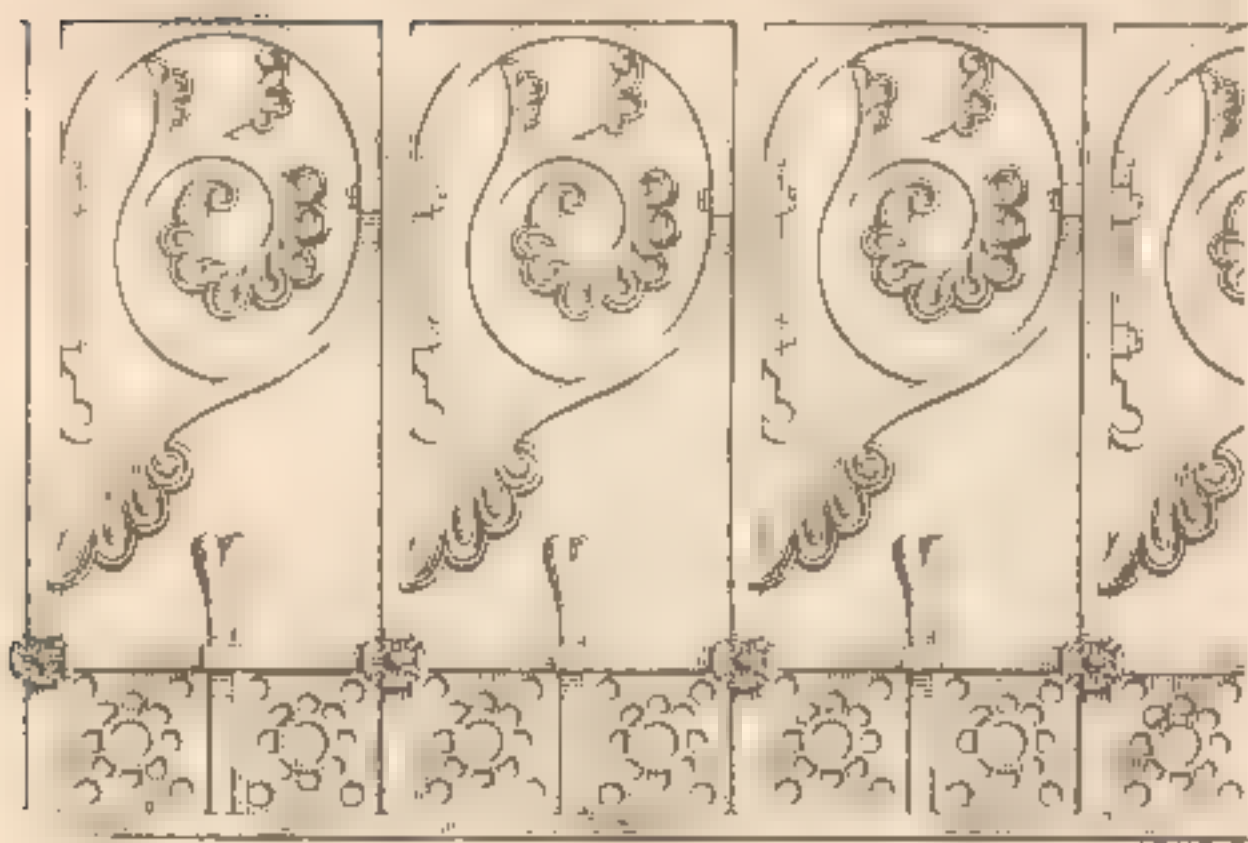
MACFARLANE'S RAILING &



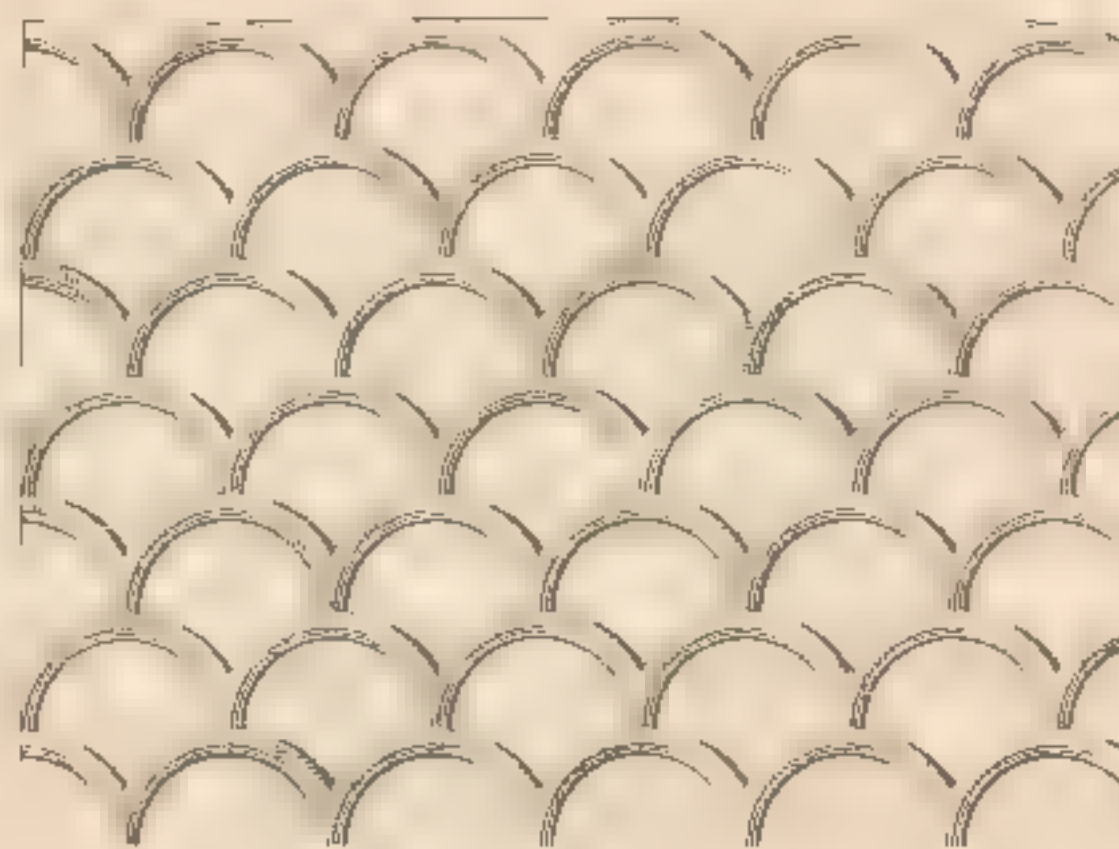
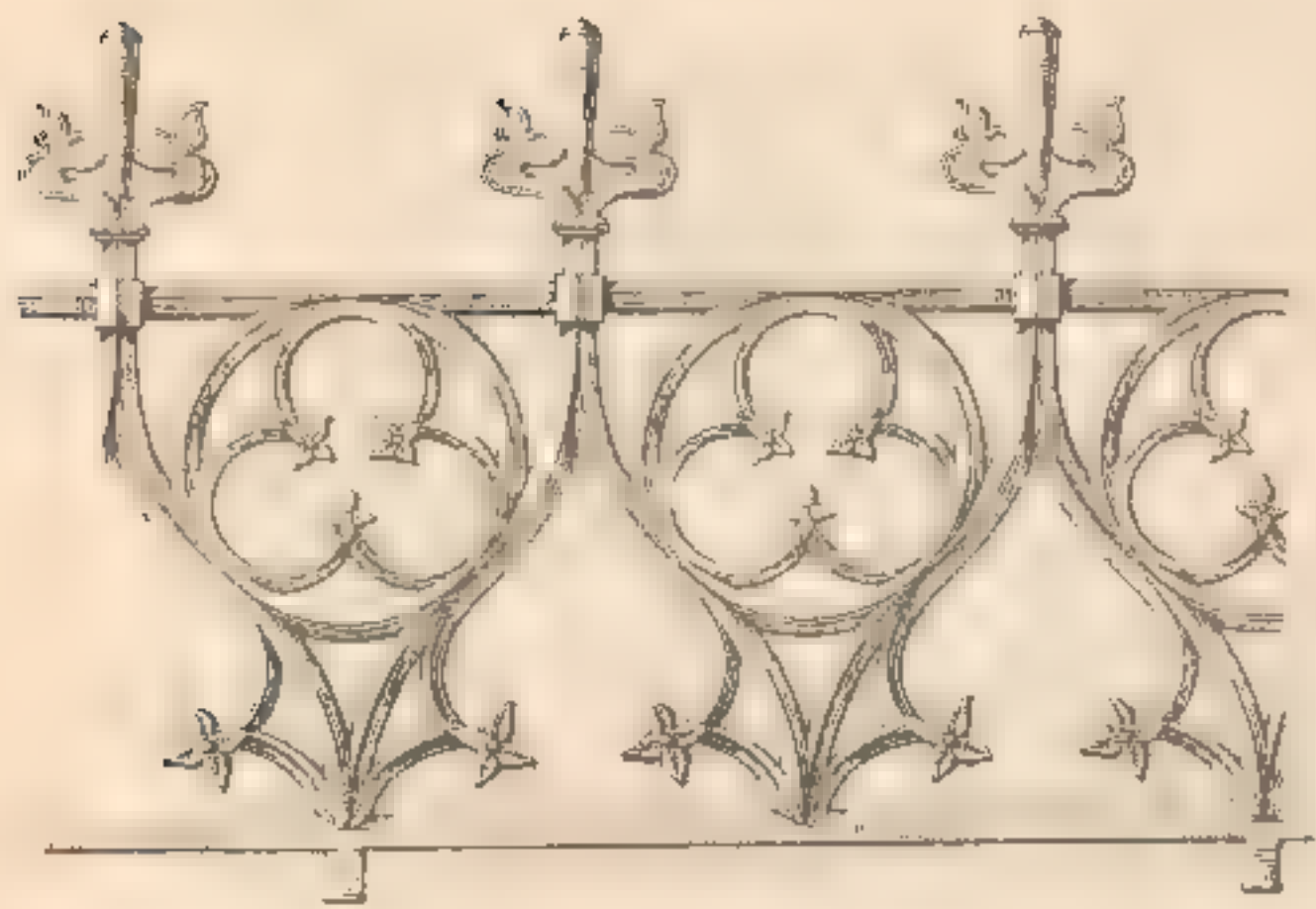
Standard height



One face

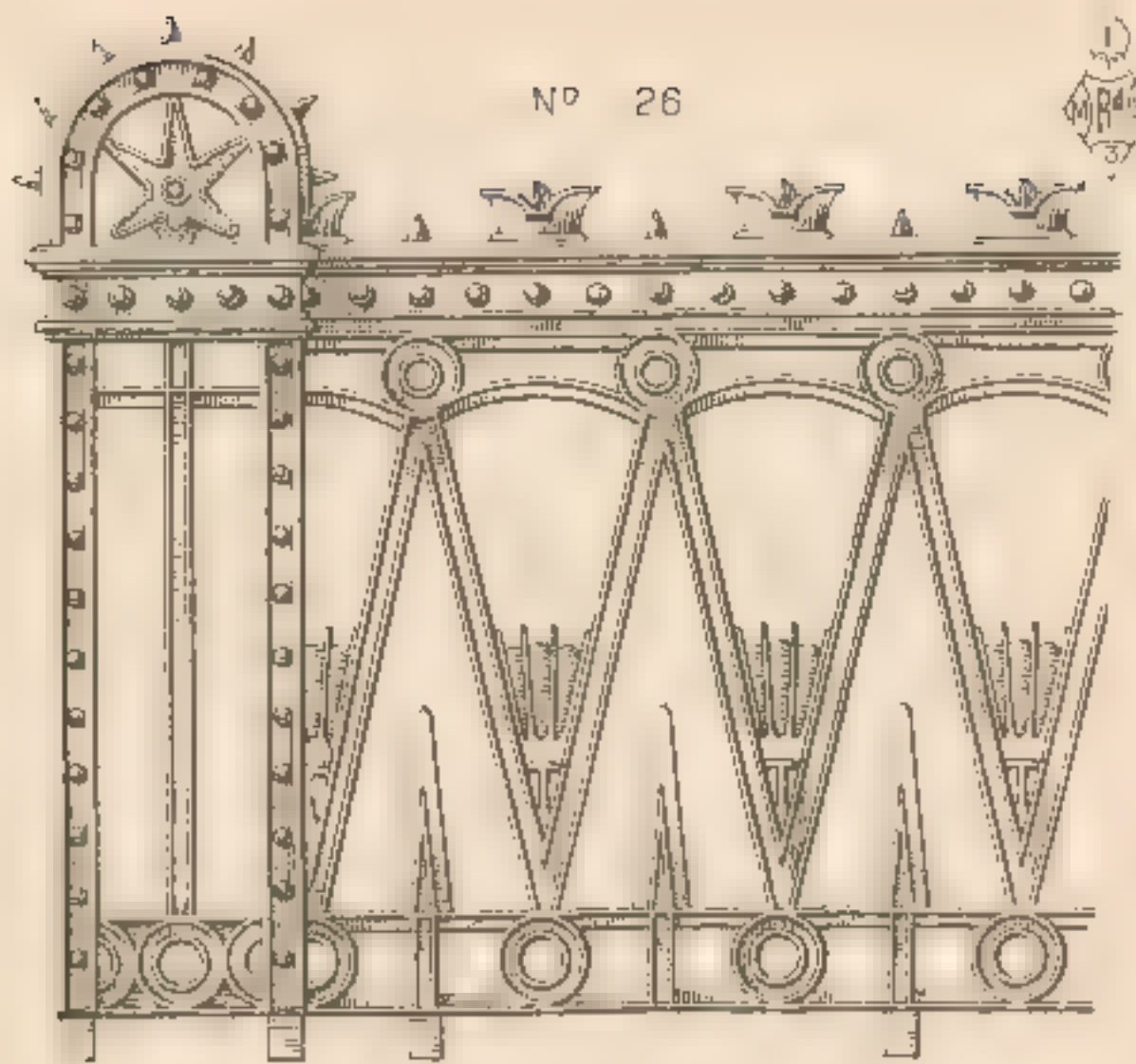


N 49

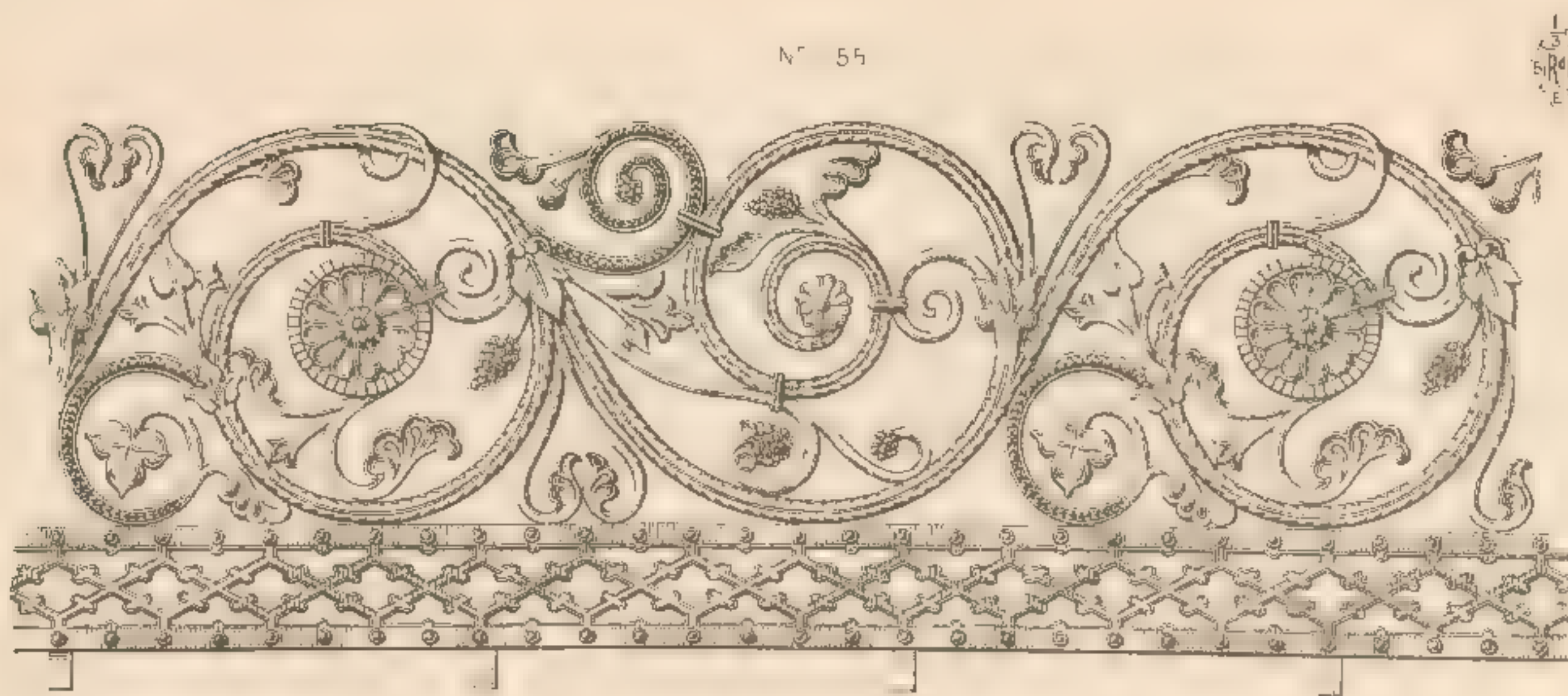
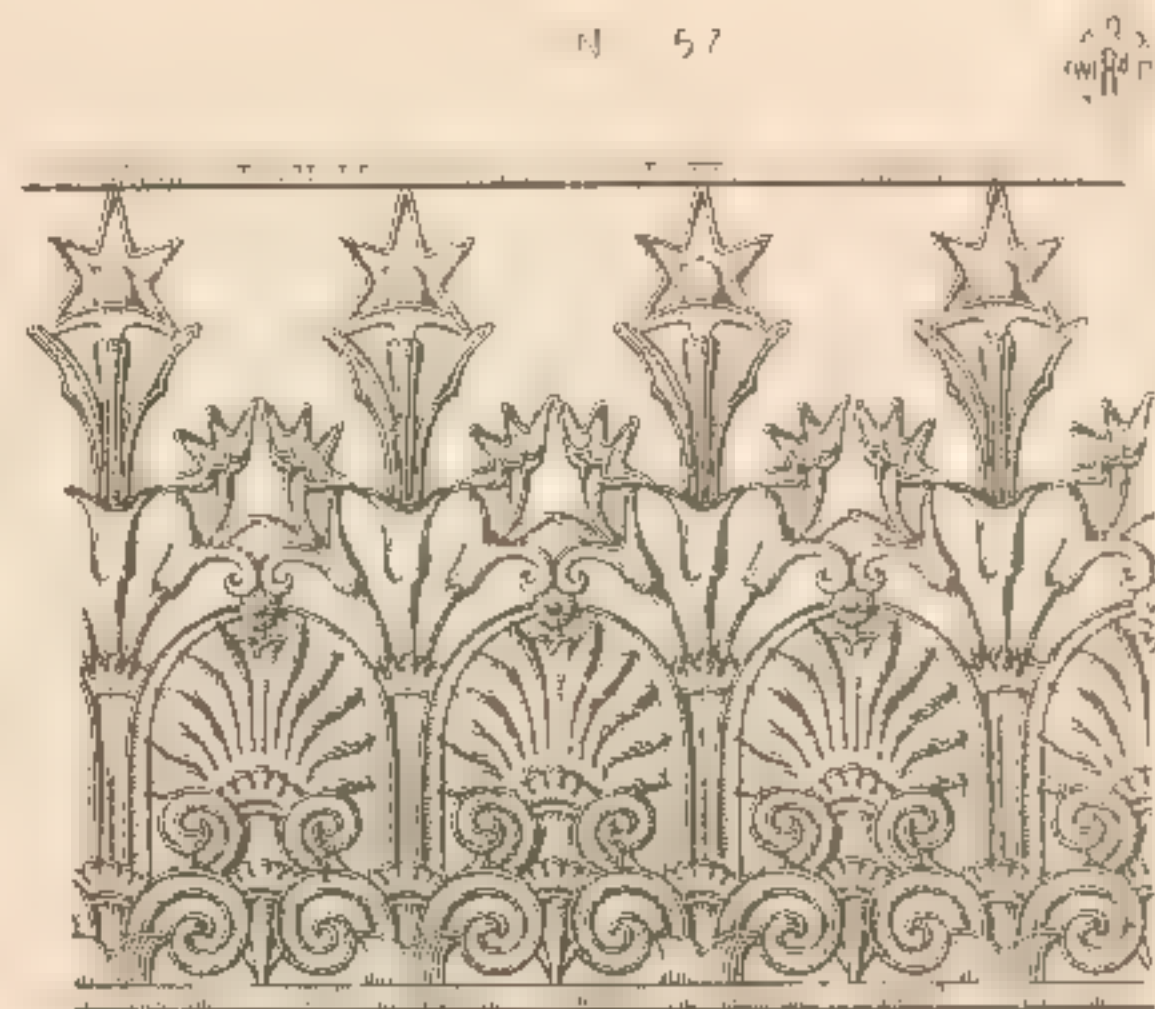
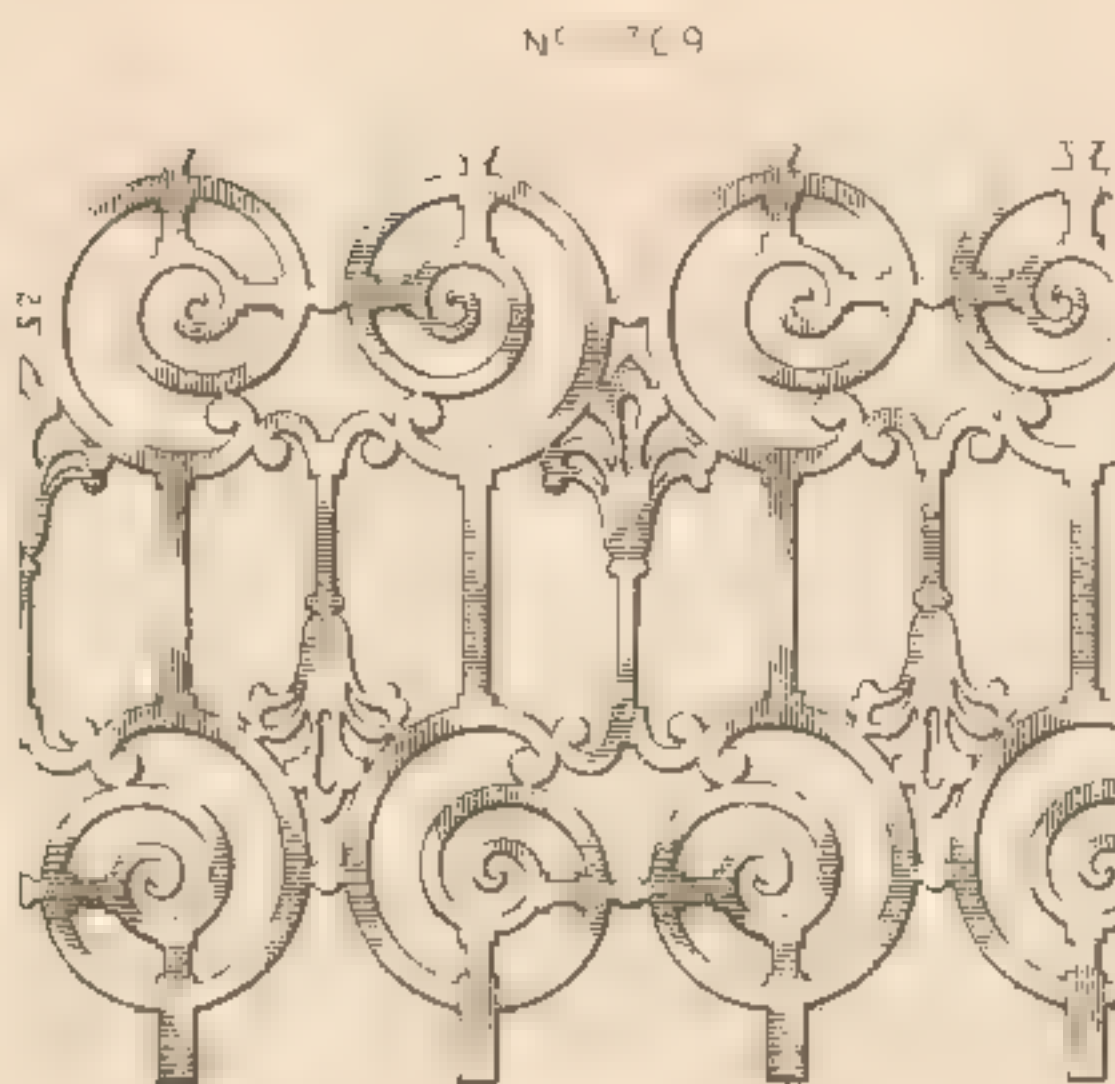
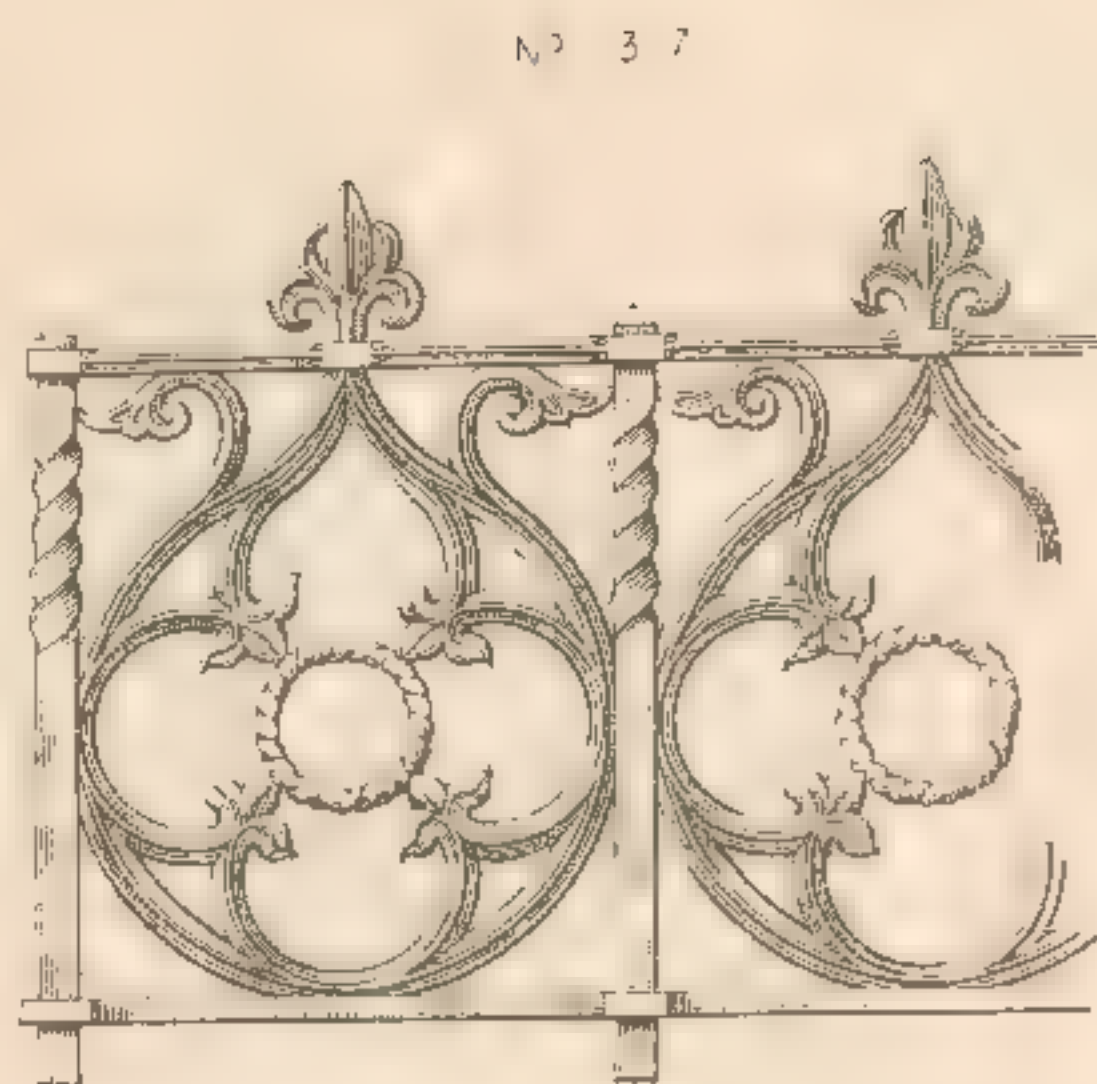


Any size to order

MACTARLANE'S RAILINGS &c.

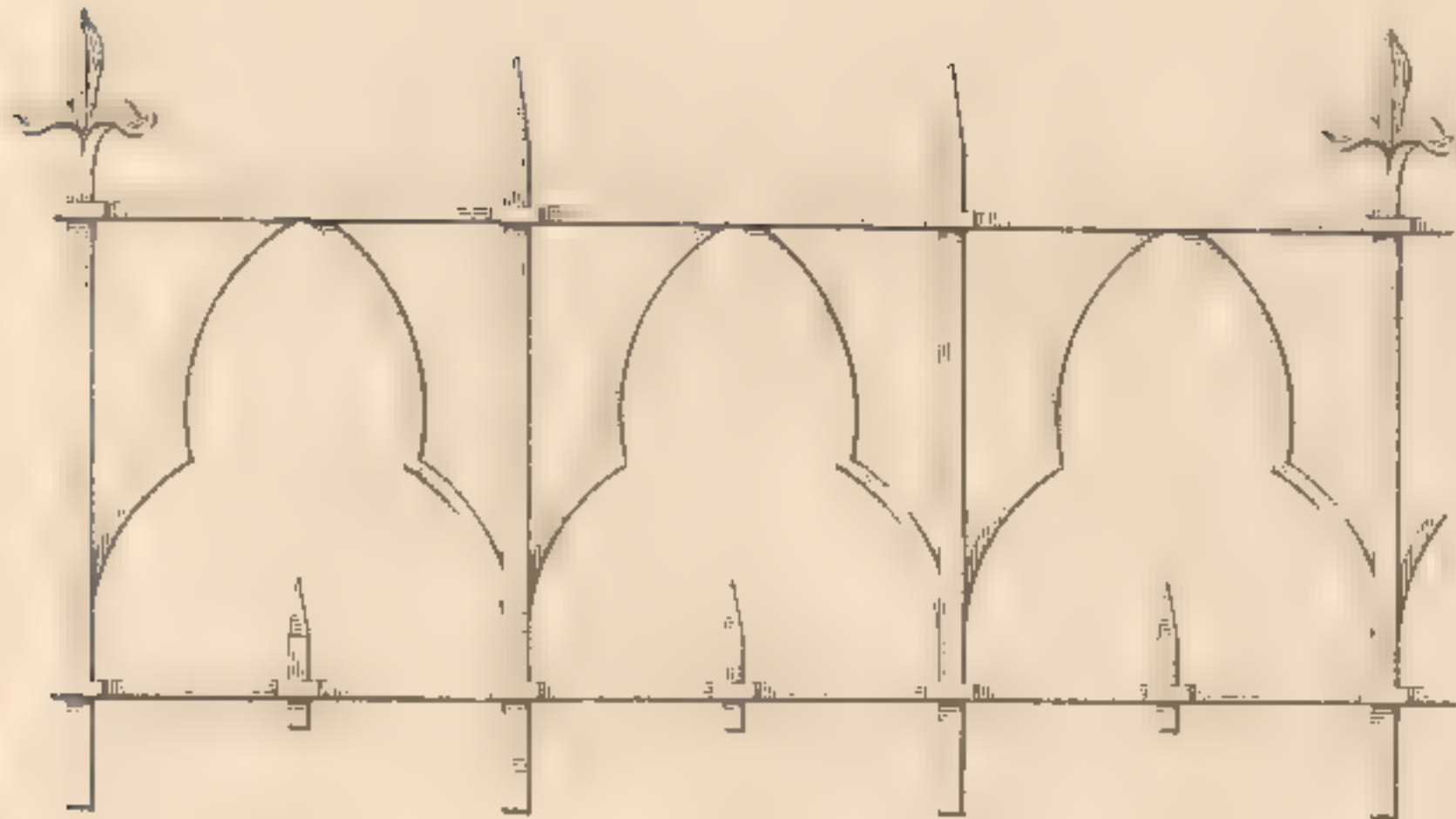


Standards charged extra.



SCALE 1 INCH = 1 FOOT

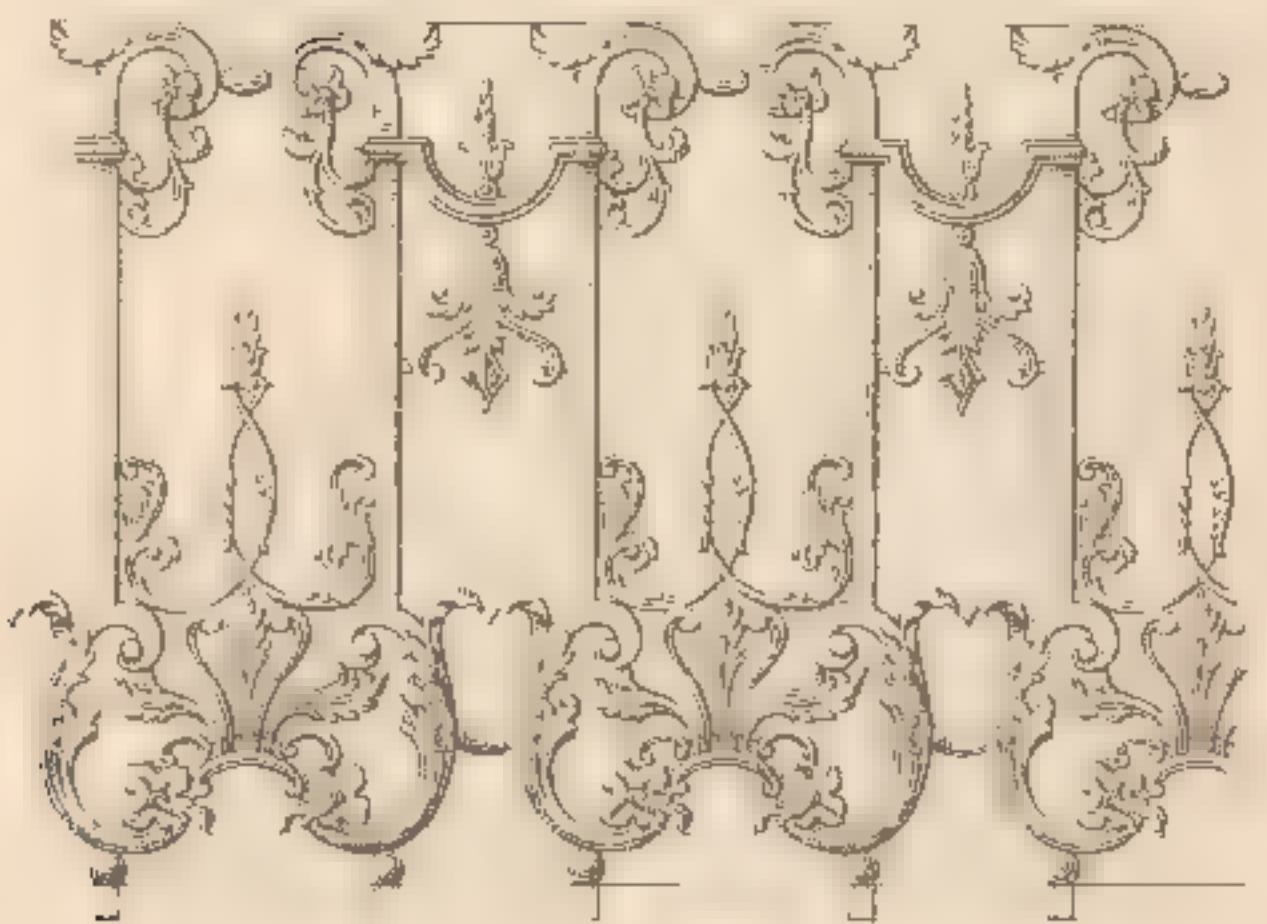
MACFARLANE'S RAILING &



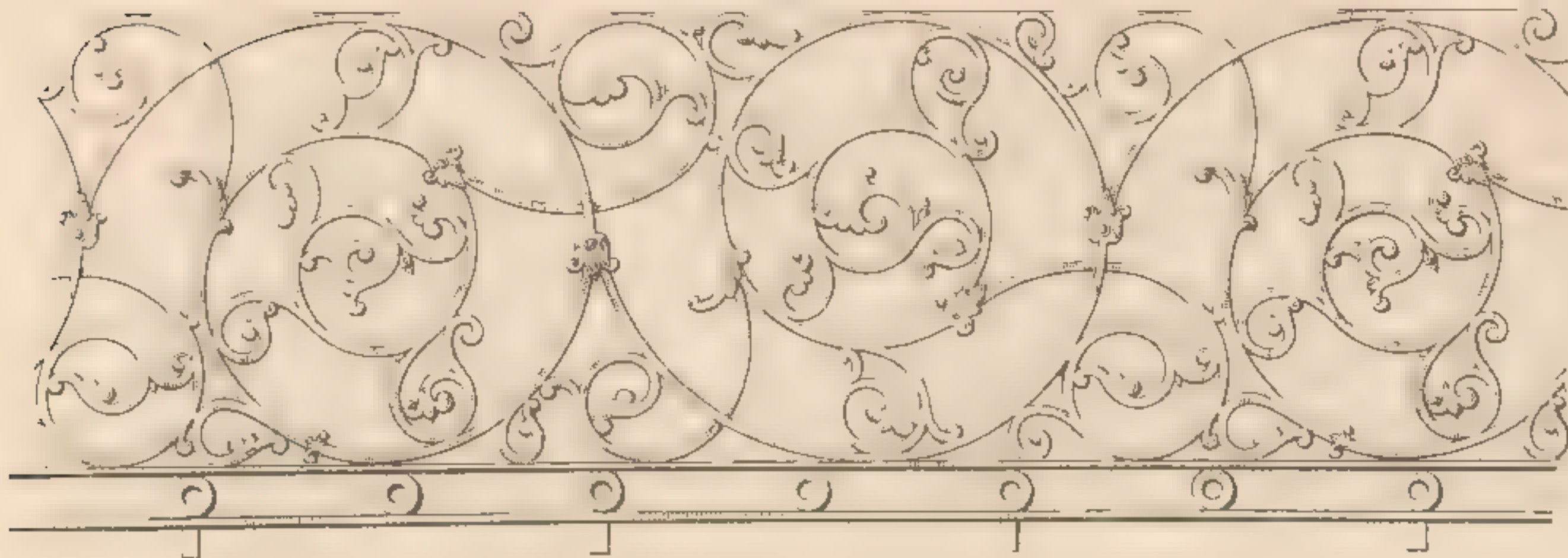
N^o 37



N^o 2

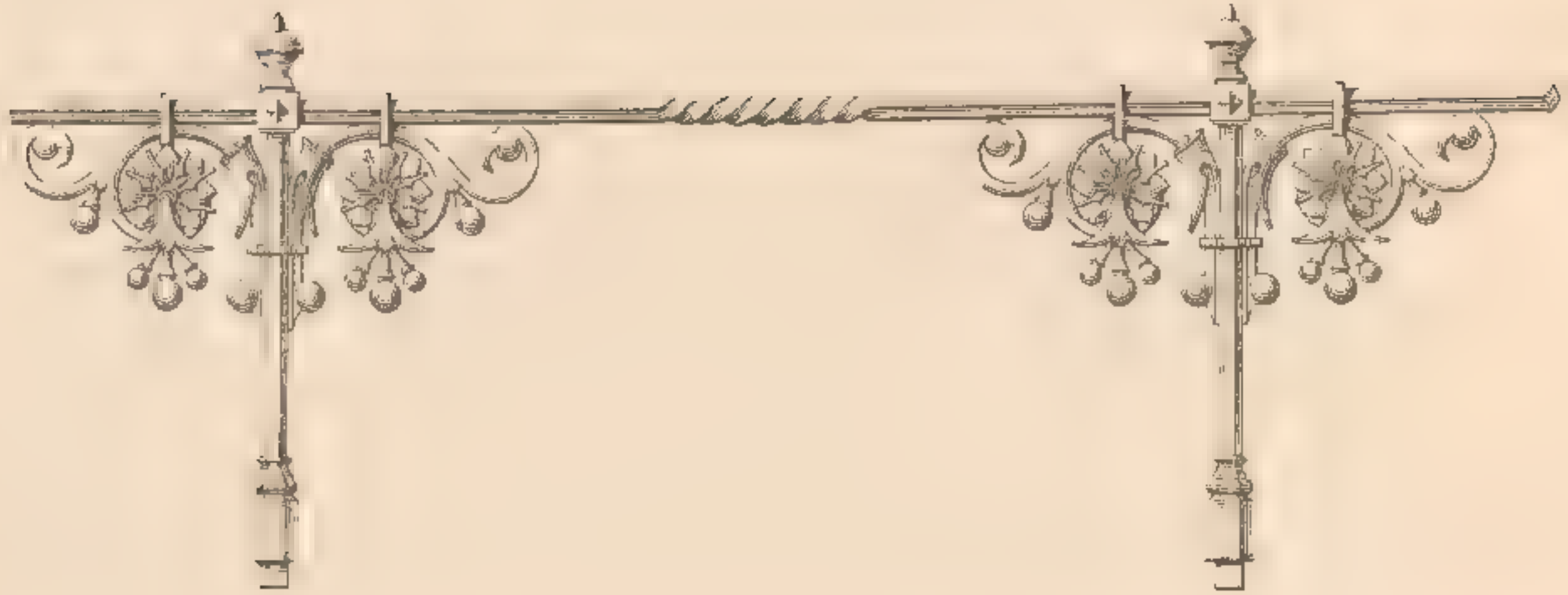


One face



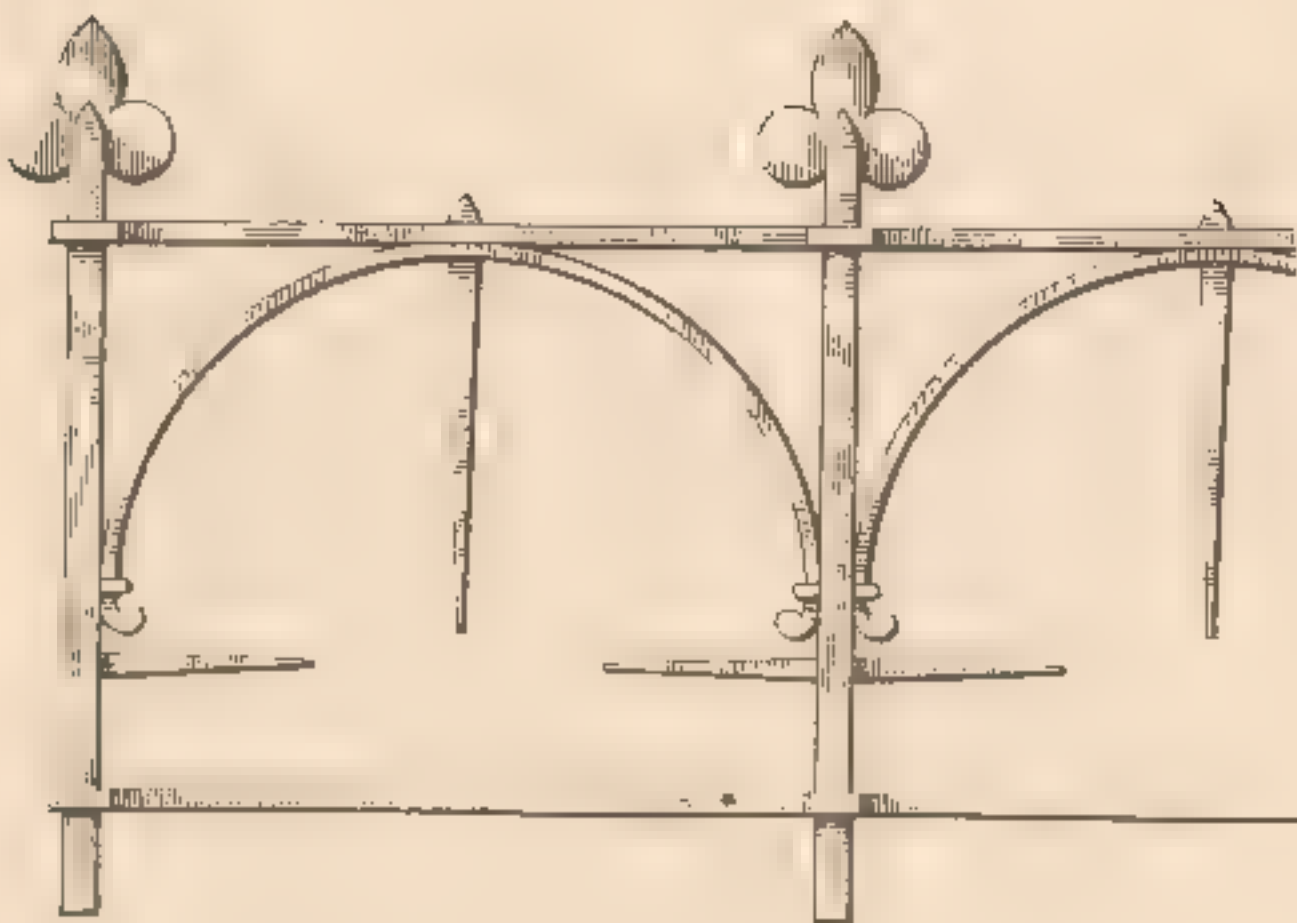
MACFARLANE'S RAILING & CO

Nº 40

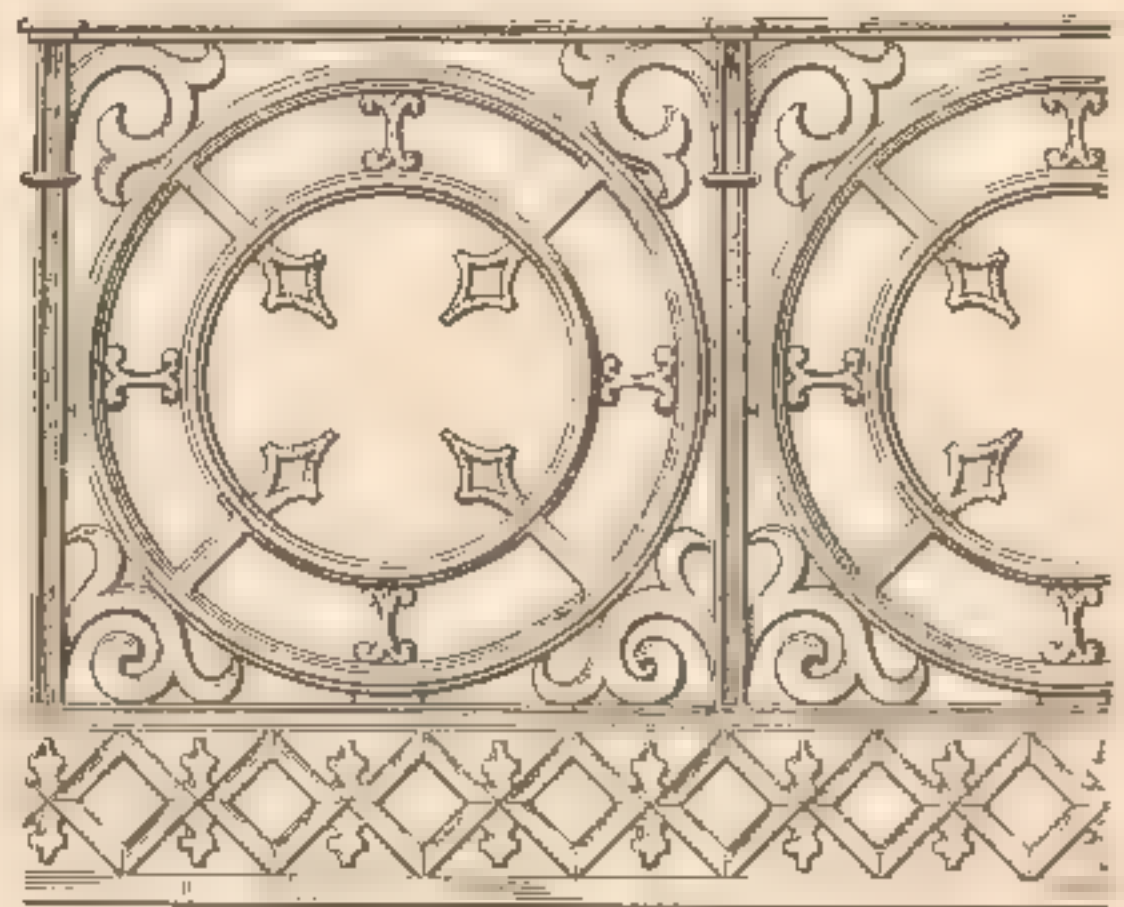


2 1 2

Nº 67

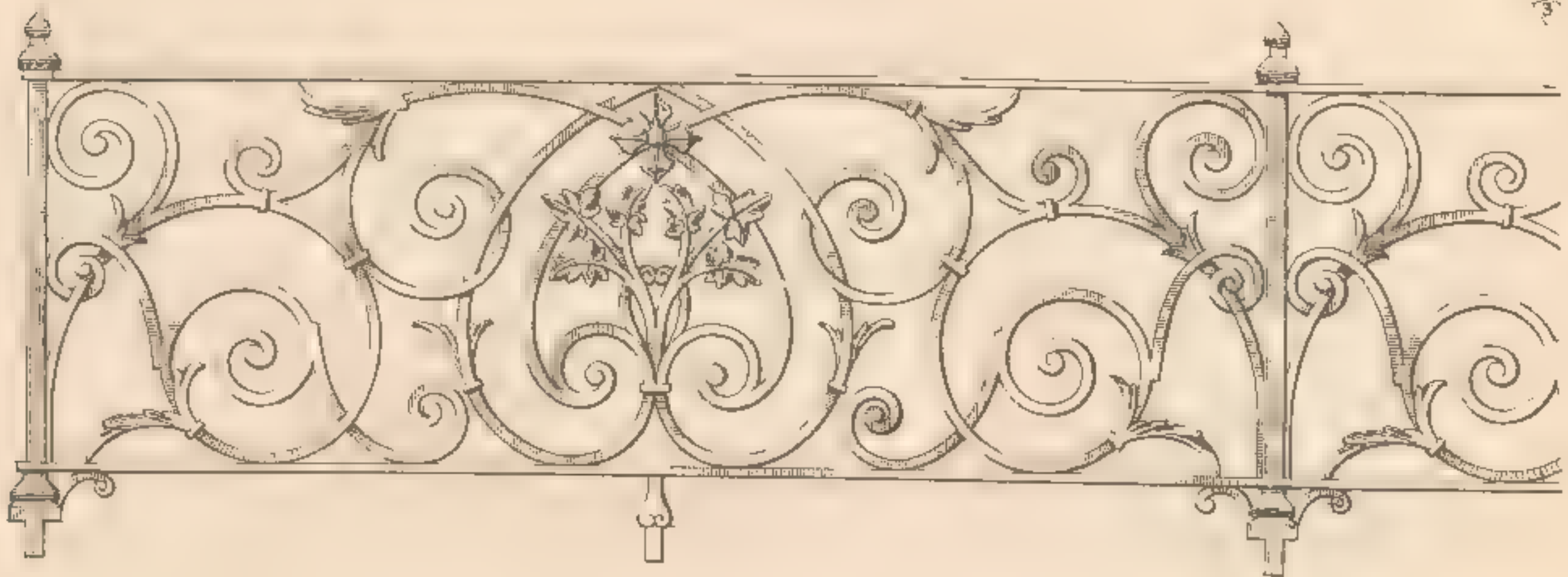


Nº 42



6

Nº 20



1/2 1/2 1/2 1/2

2 5 4

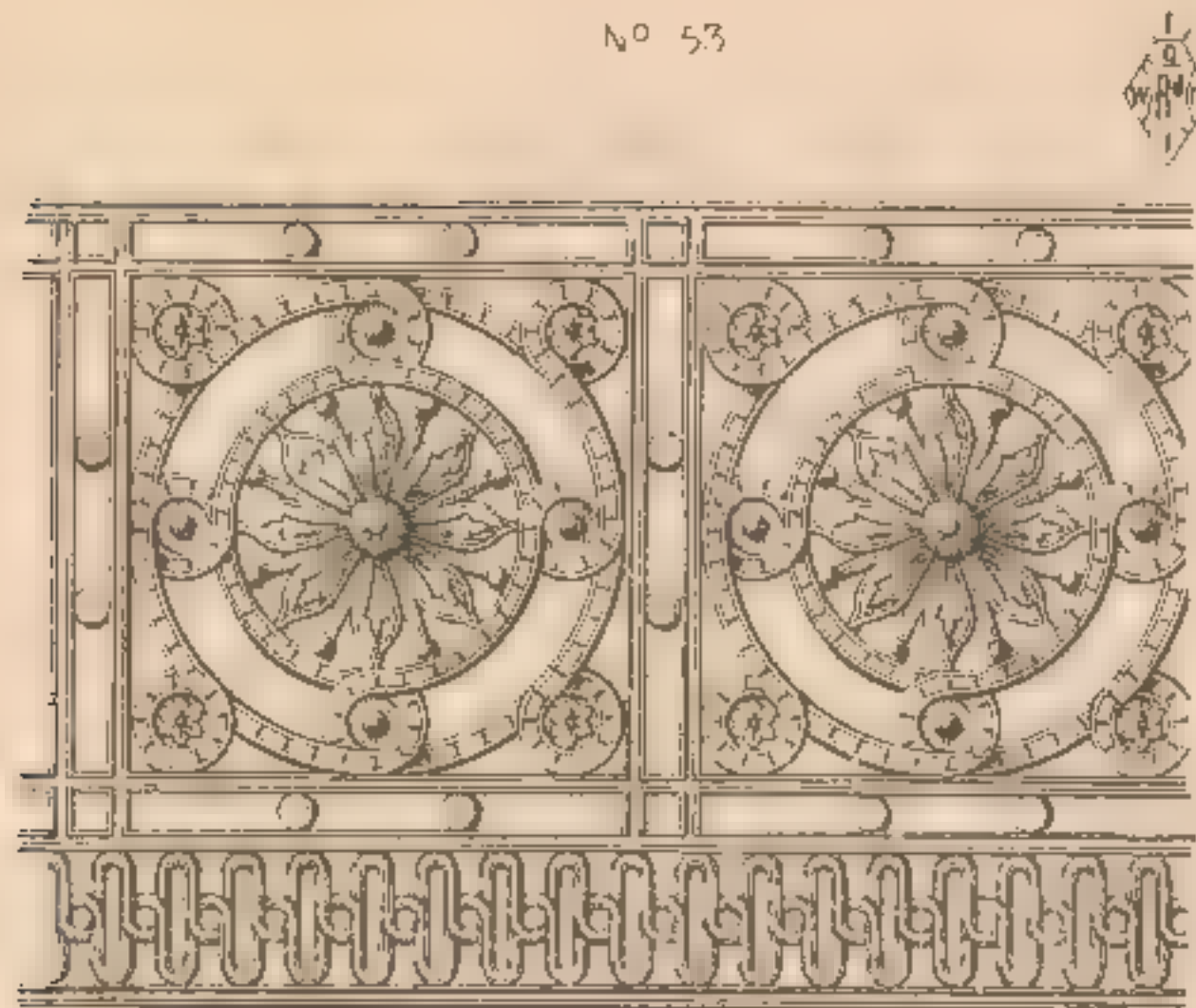
TABLE N.º 4

MACFARLANE'S RAILING & CO

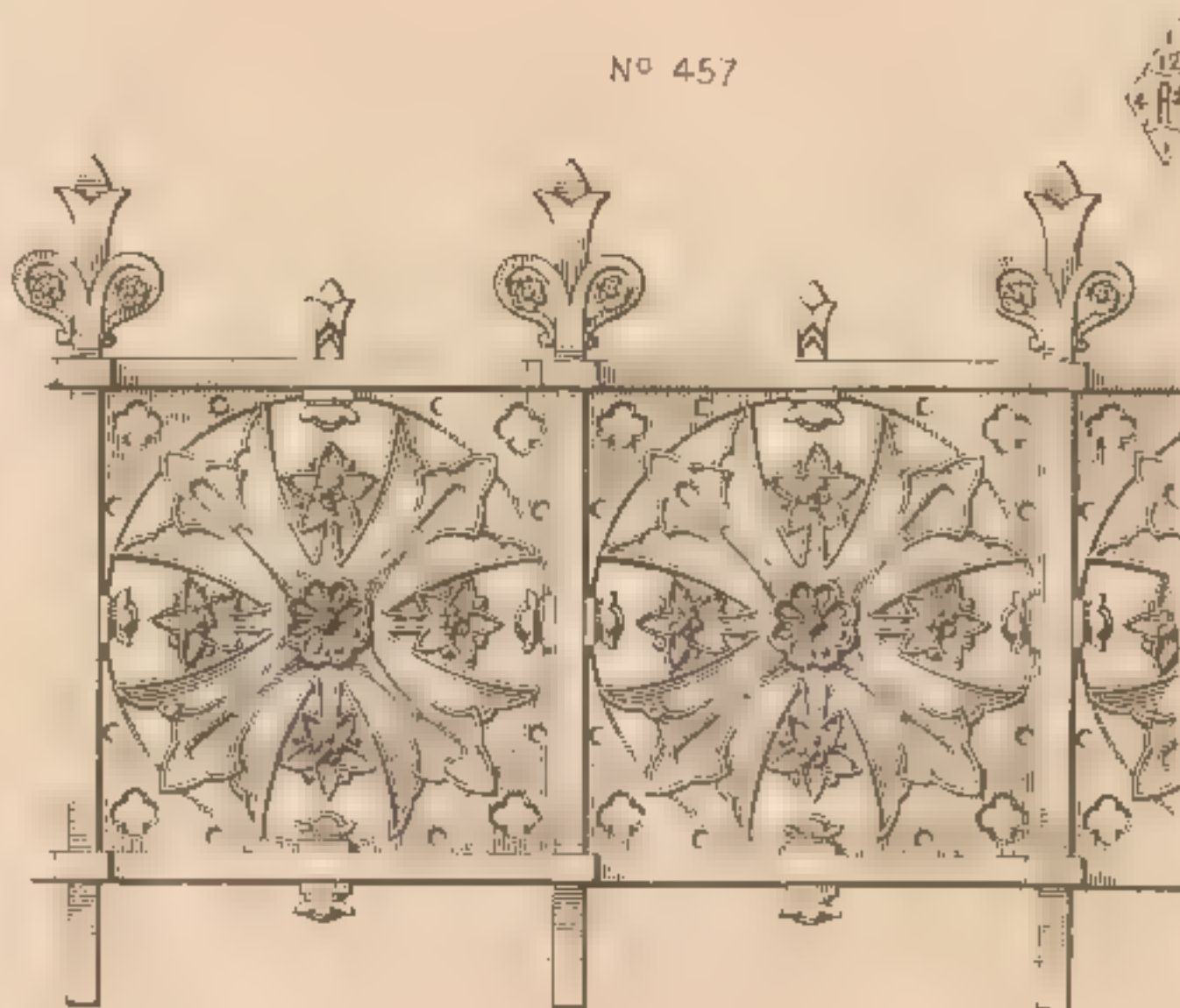
Nº 20



Nº 53



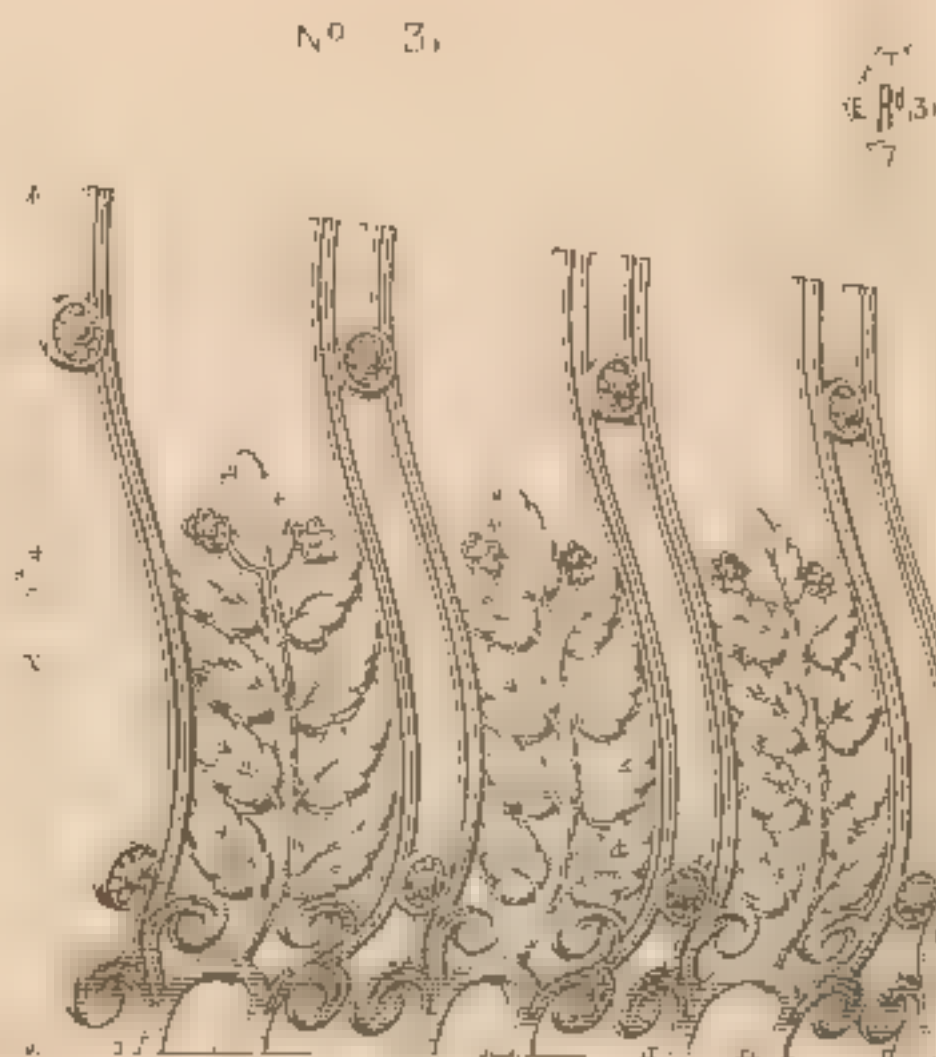
Nº 457



Nº 48



Nº 31

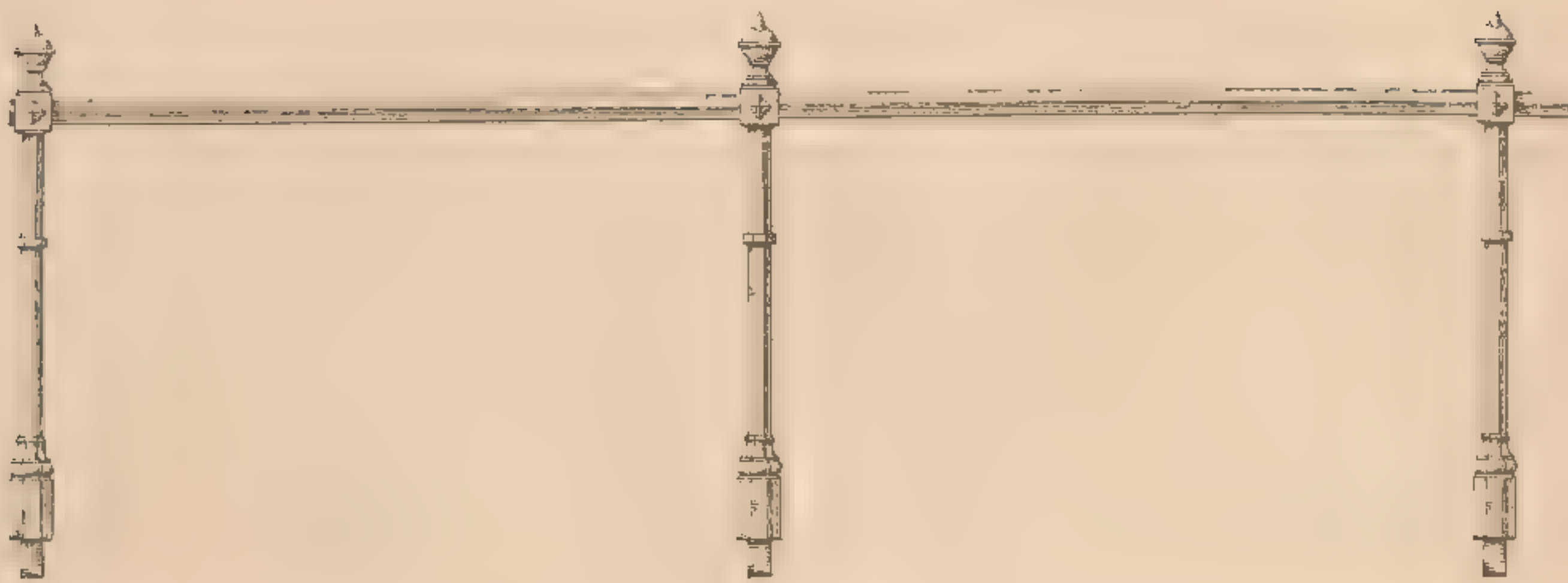


One face

FOOT

MACFARLANE'S RAILING & CO

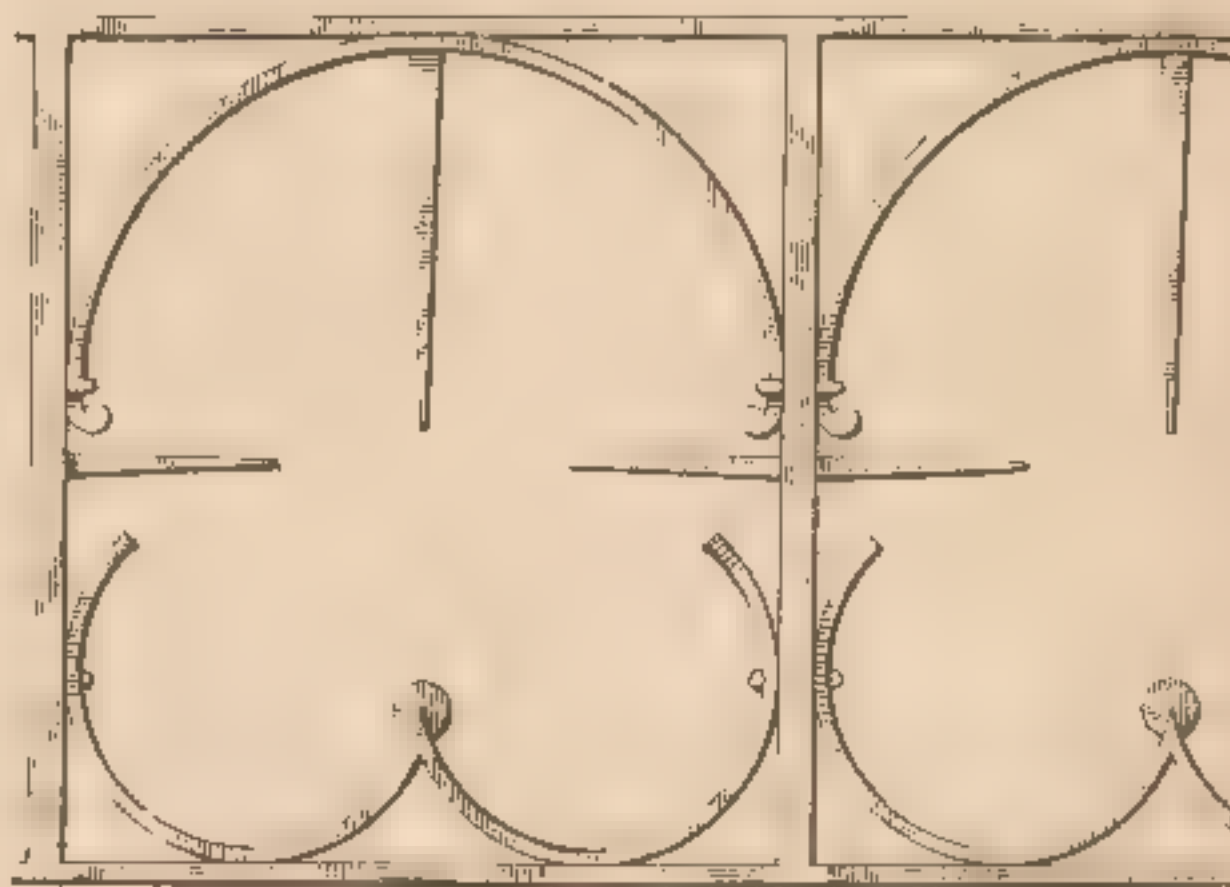
Nº 88



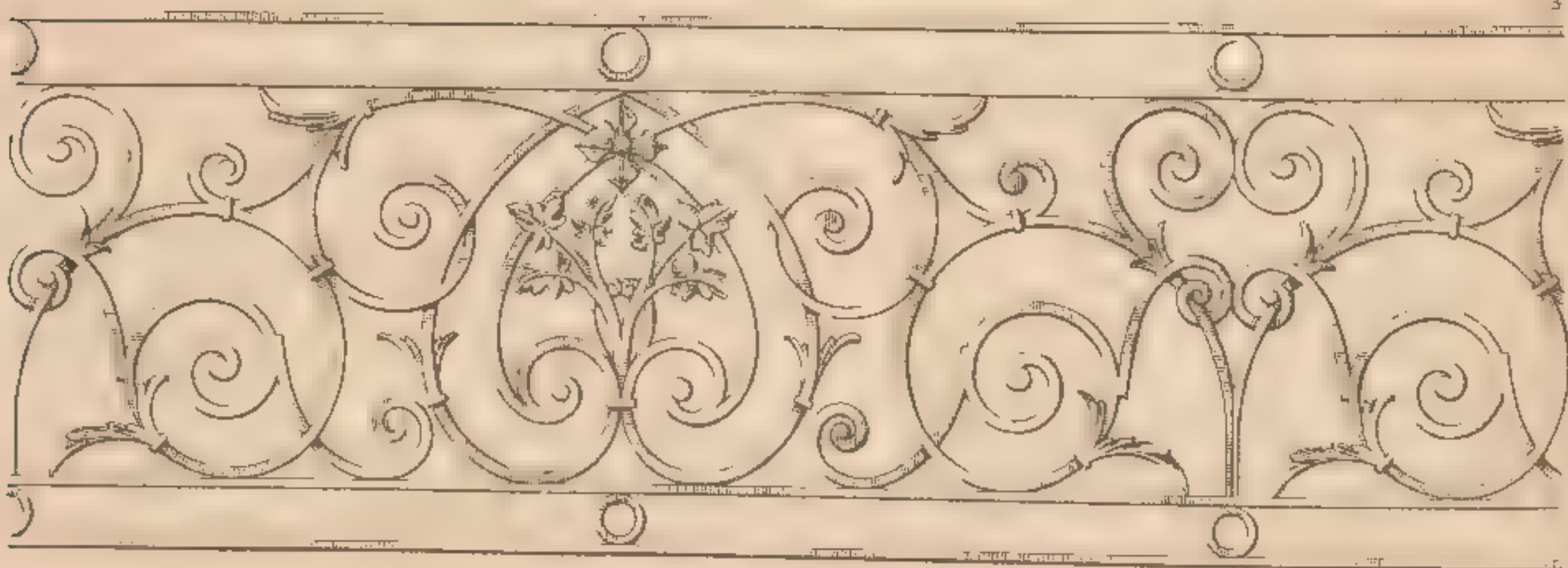
Nº 3



Nº 67



Nº 201

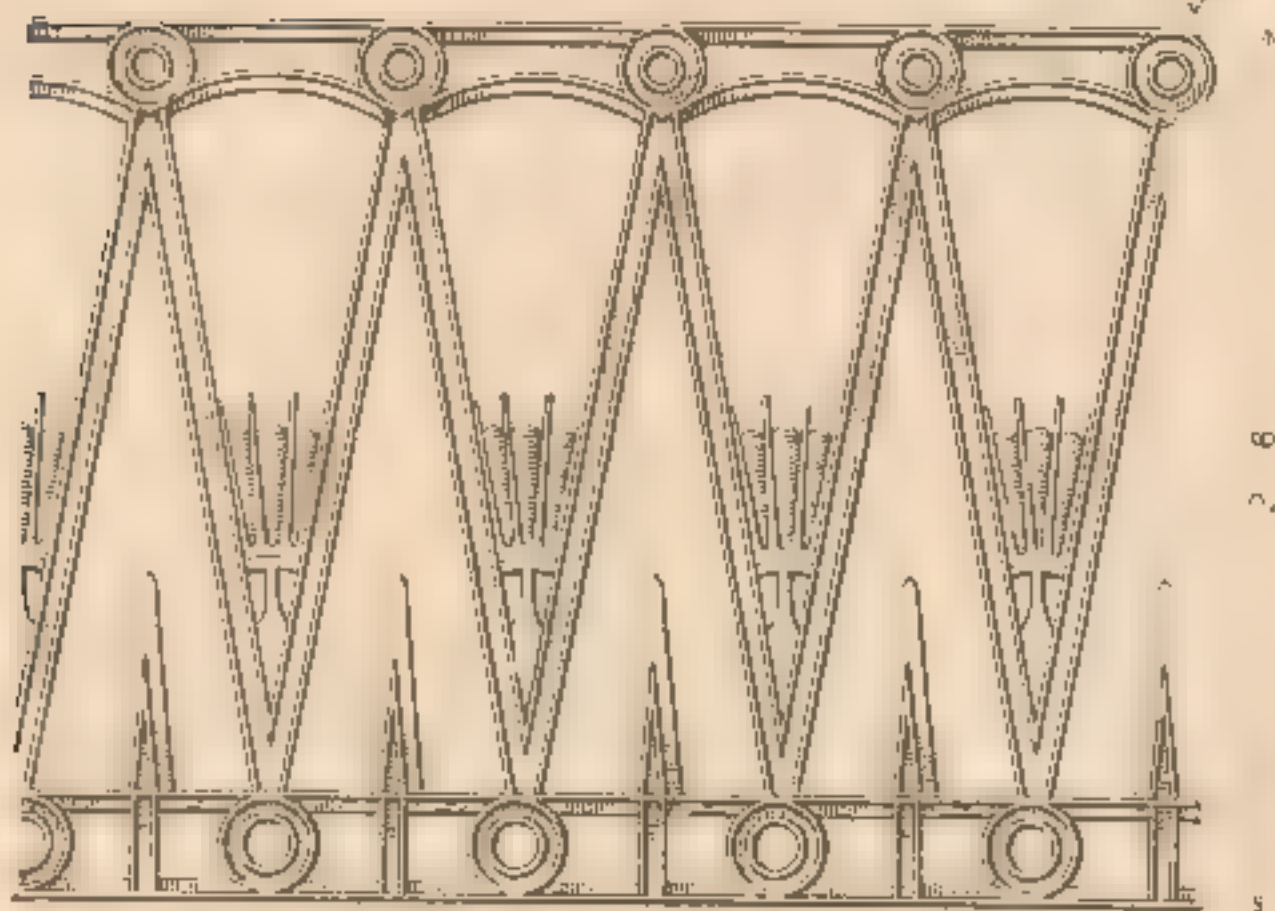


MACFARLANE'S RAILING & CO

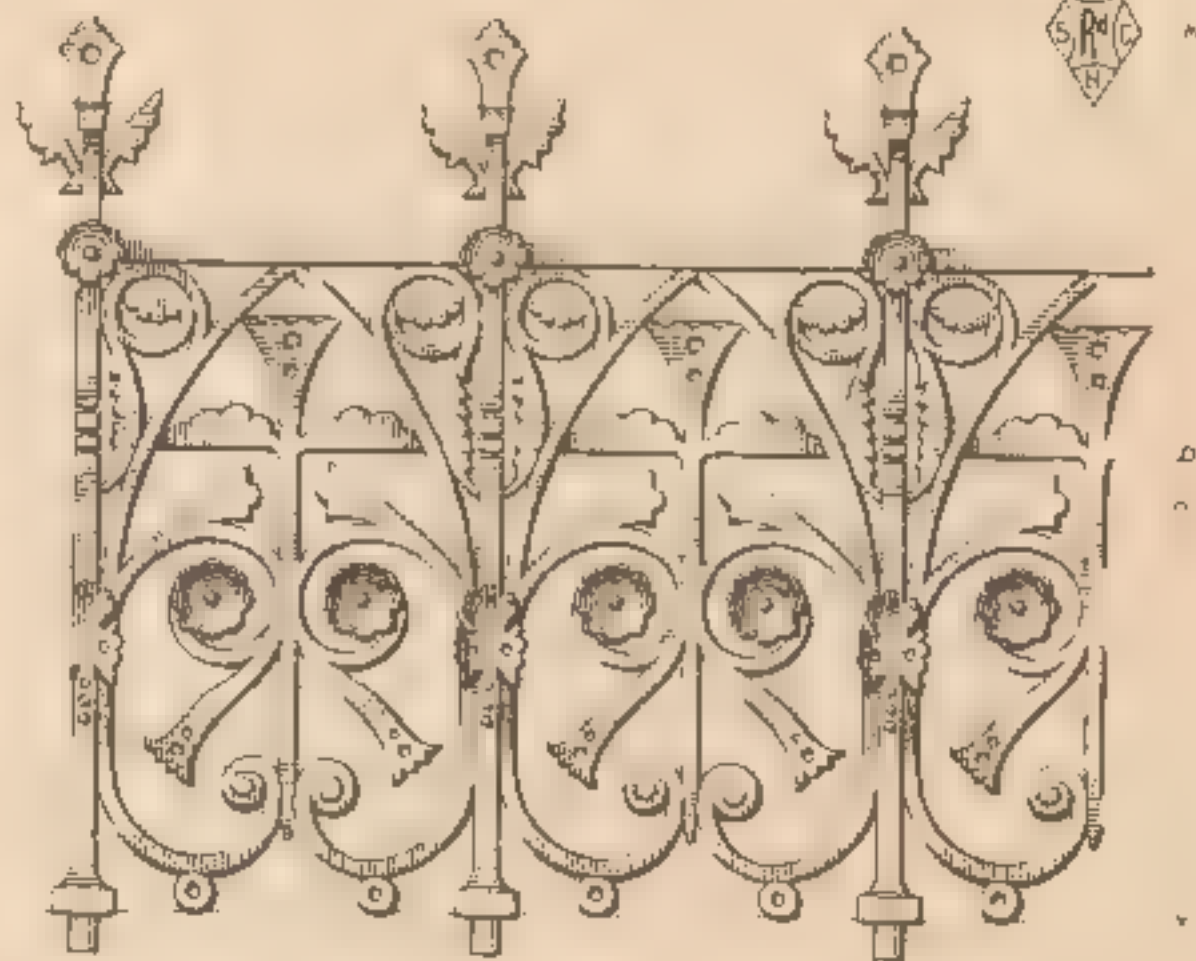
Nº 33



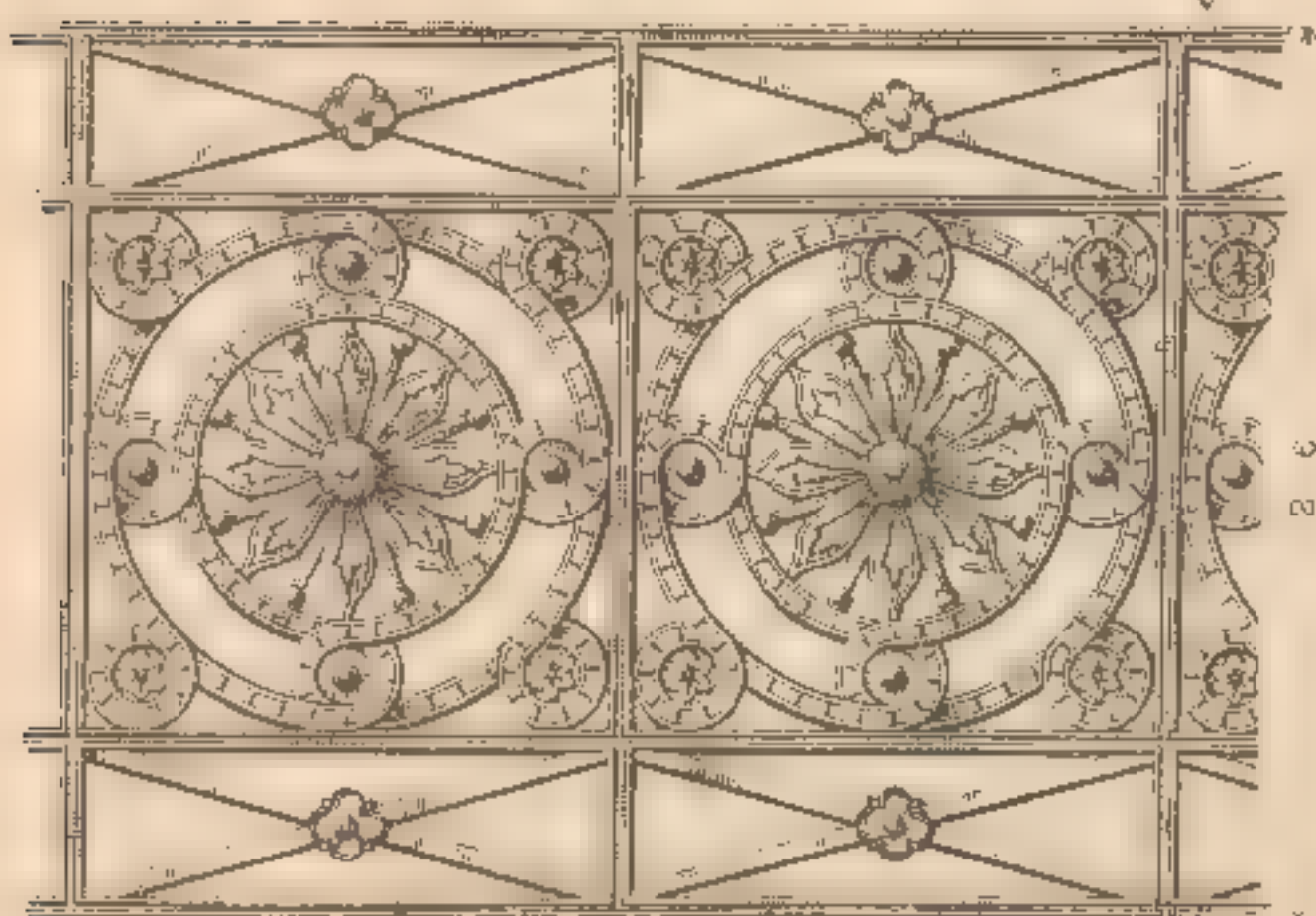
Nº 126



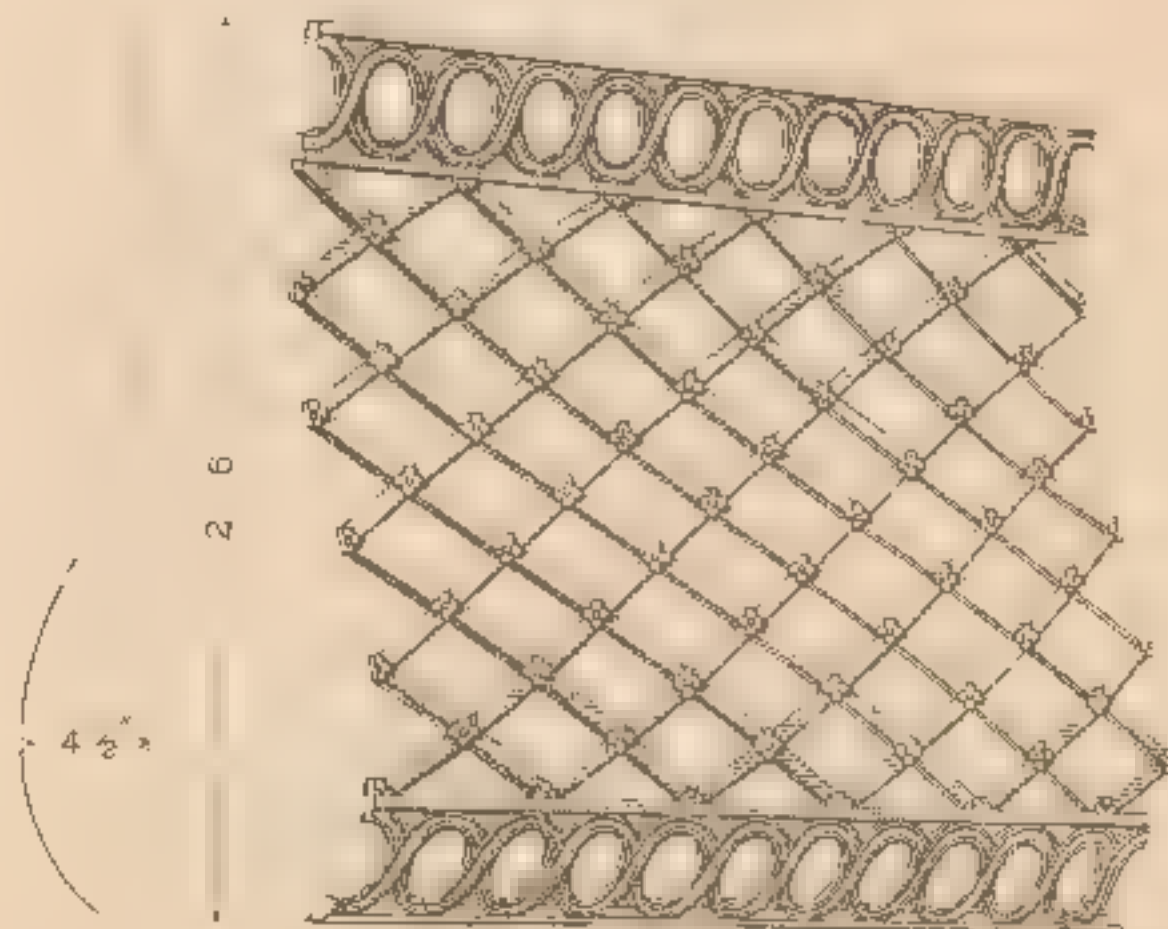
Nº 72



Nº 57



Nº 326



One face

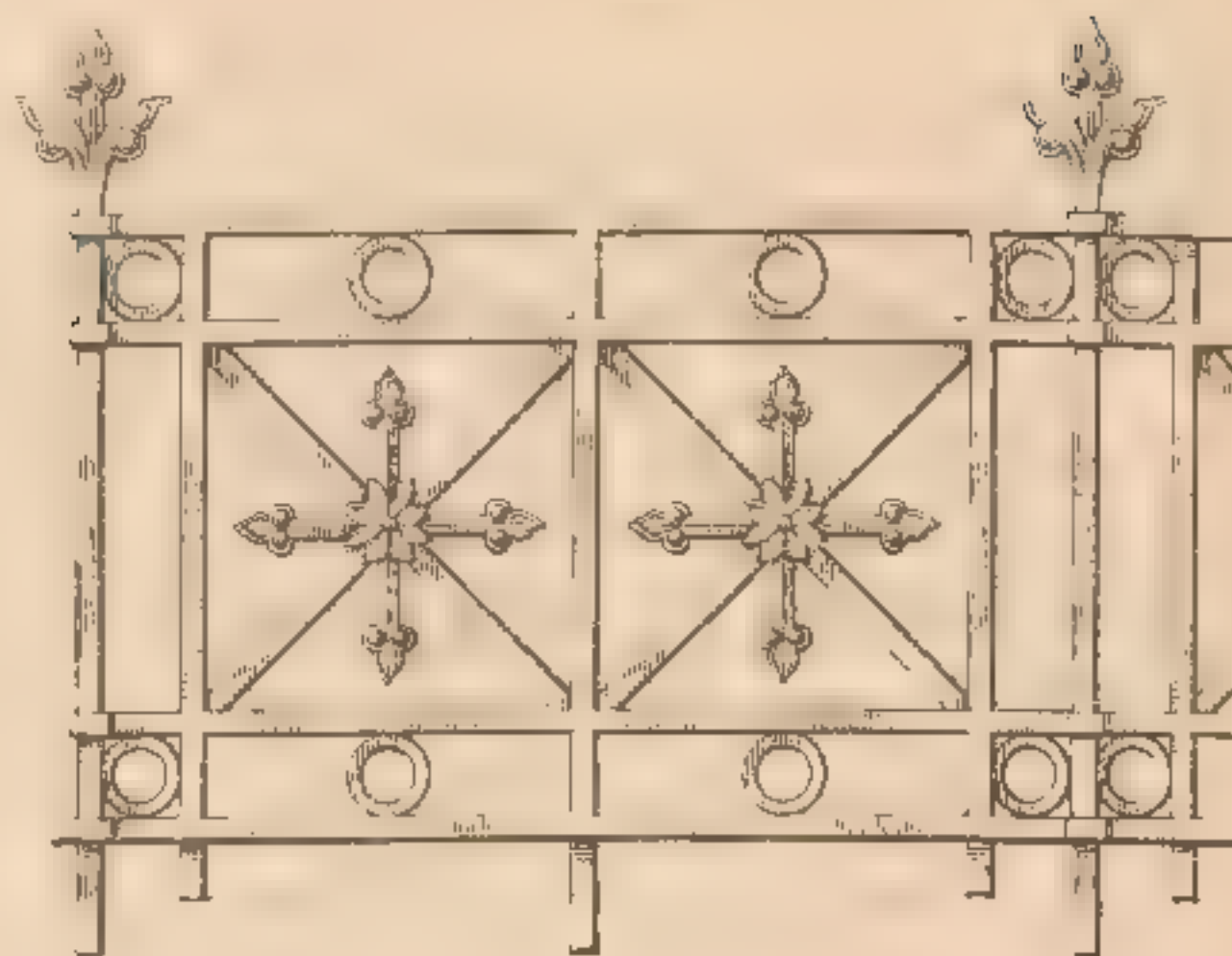
SCALE 1/4" = 1' 0"

MACFARLANE'S RAILING & CO

A



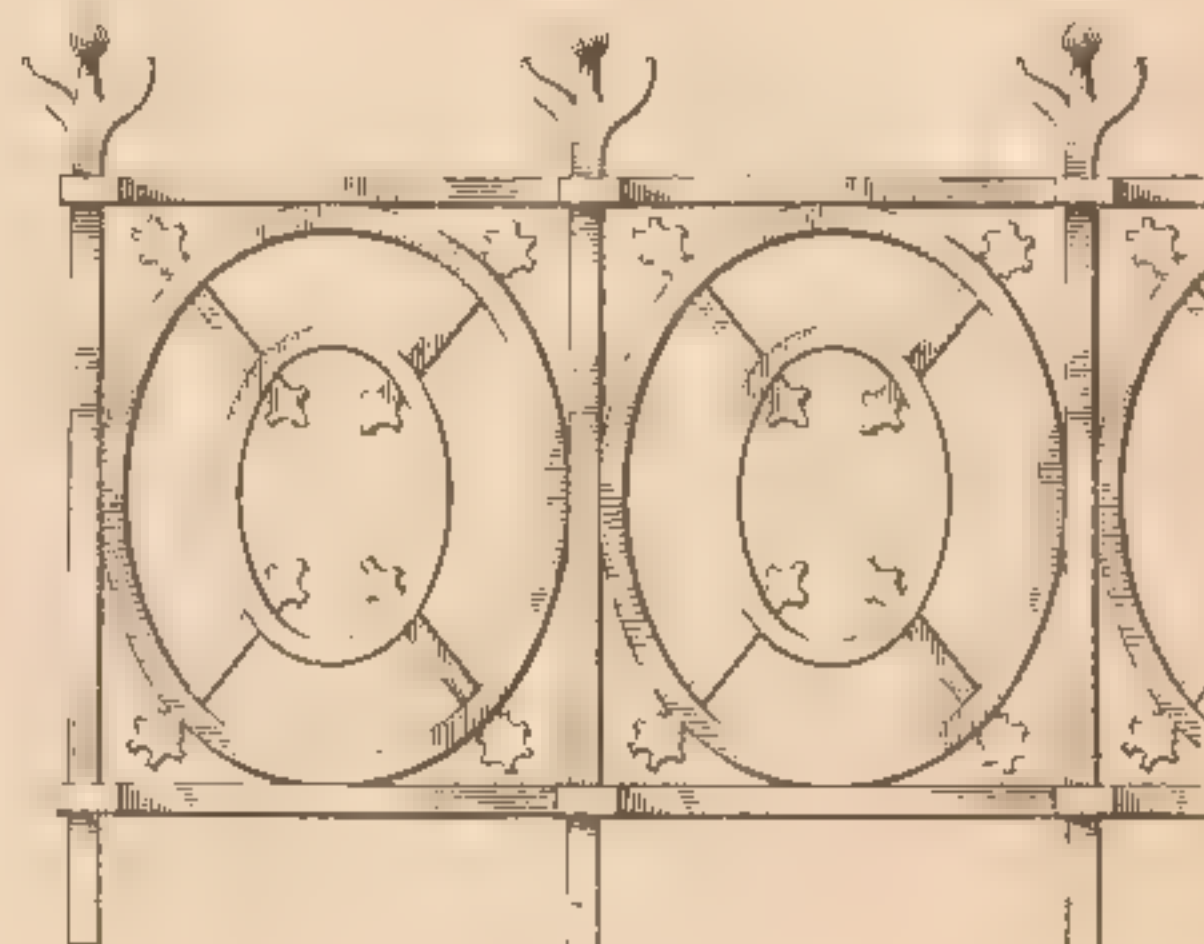
N° 24



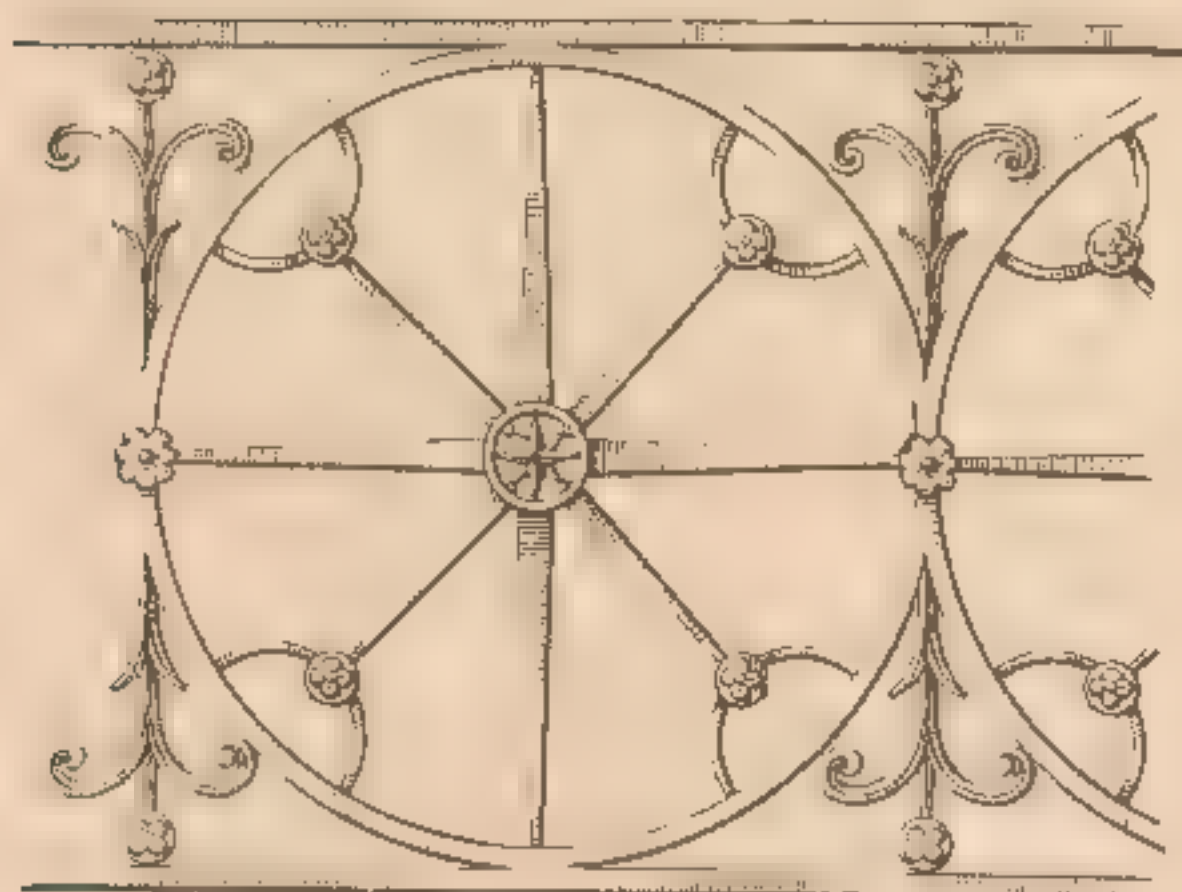
N° 48



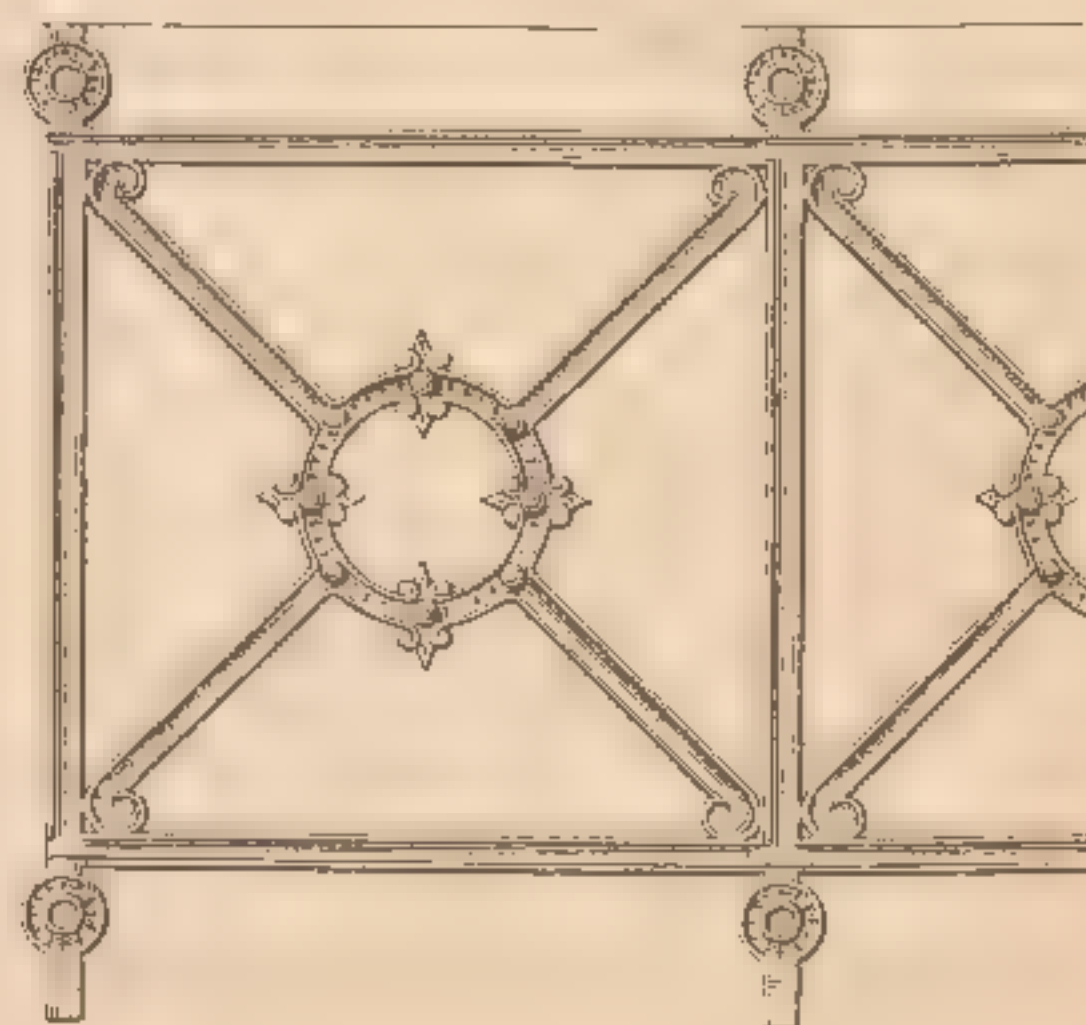
N° 47



N° 28

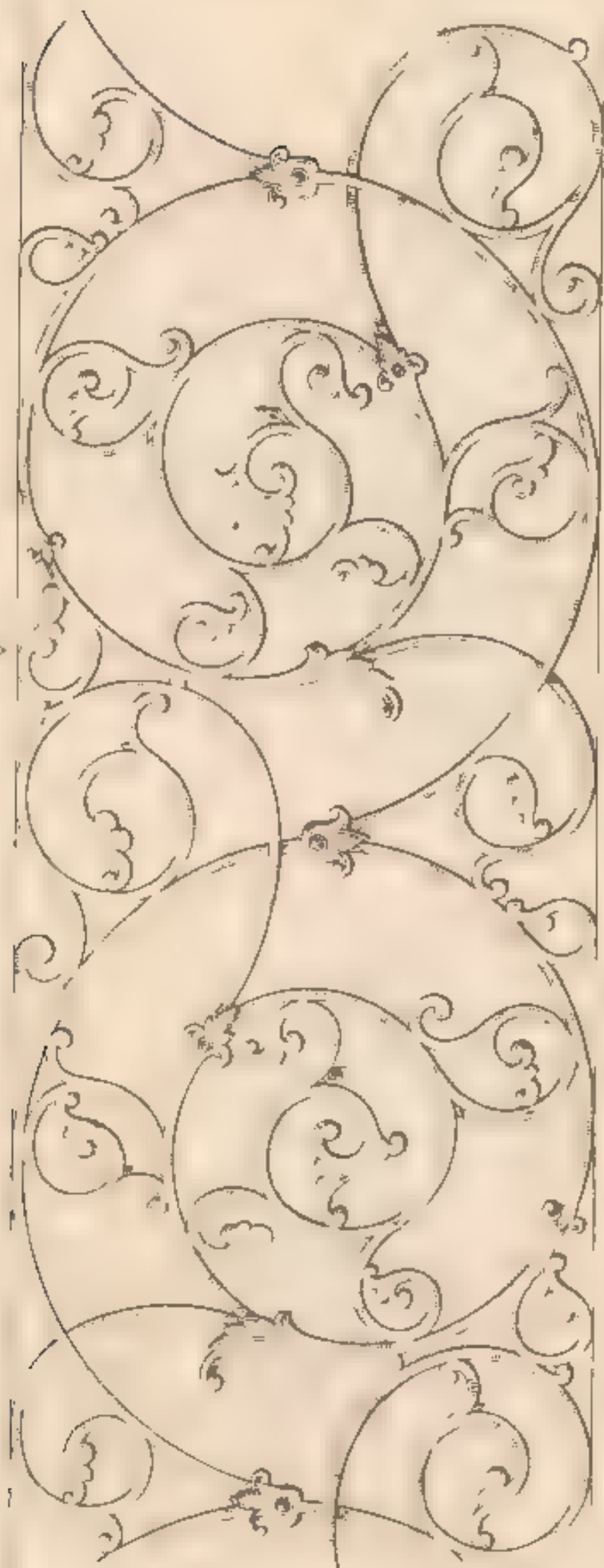


N° 394

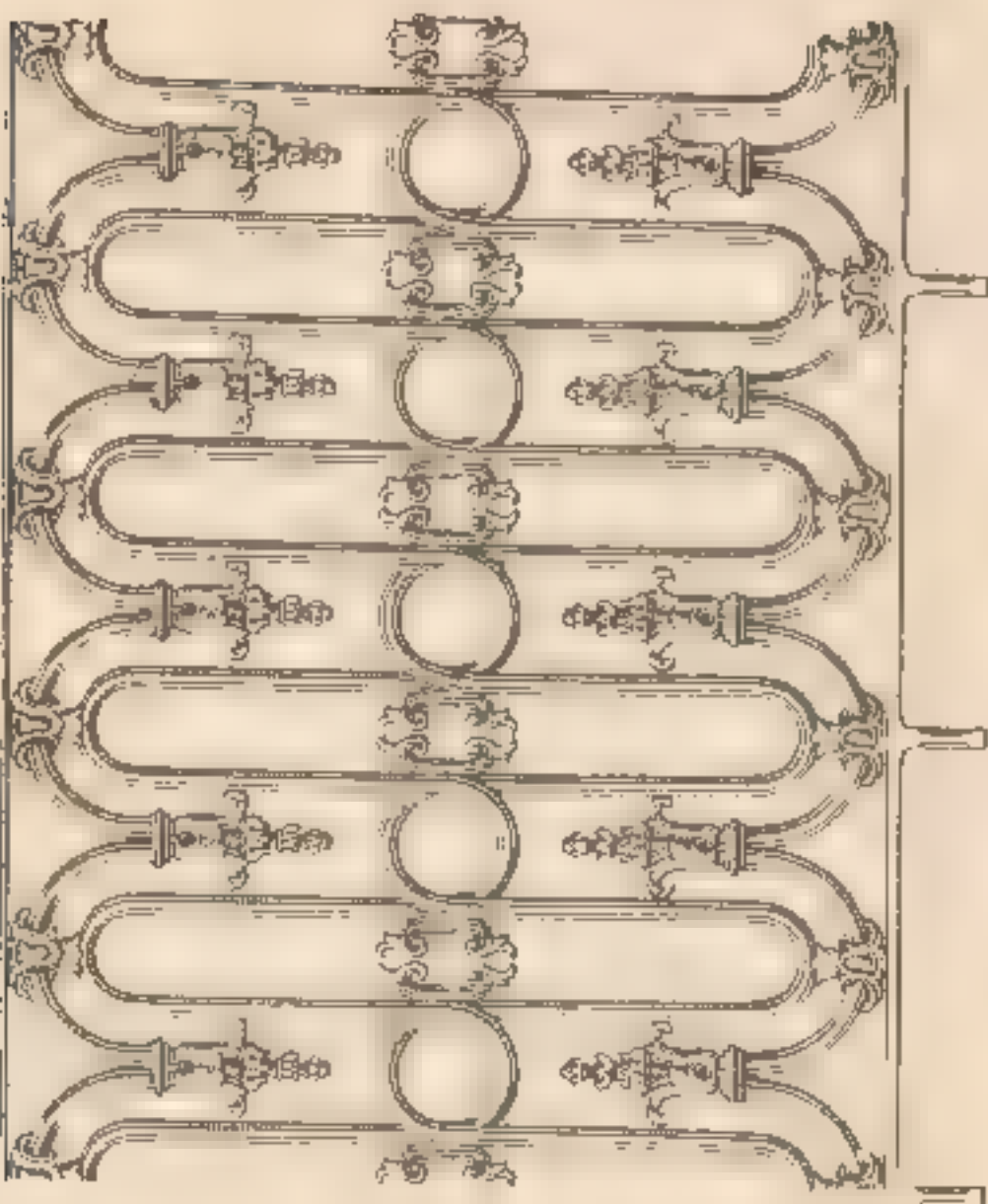


MACFARLANE'S RAILING & C

N^o 32
15/10/10



N^o 34



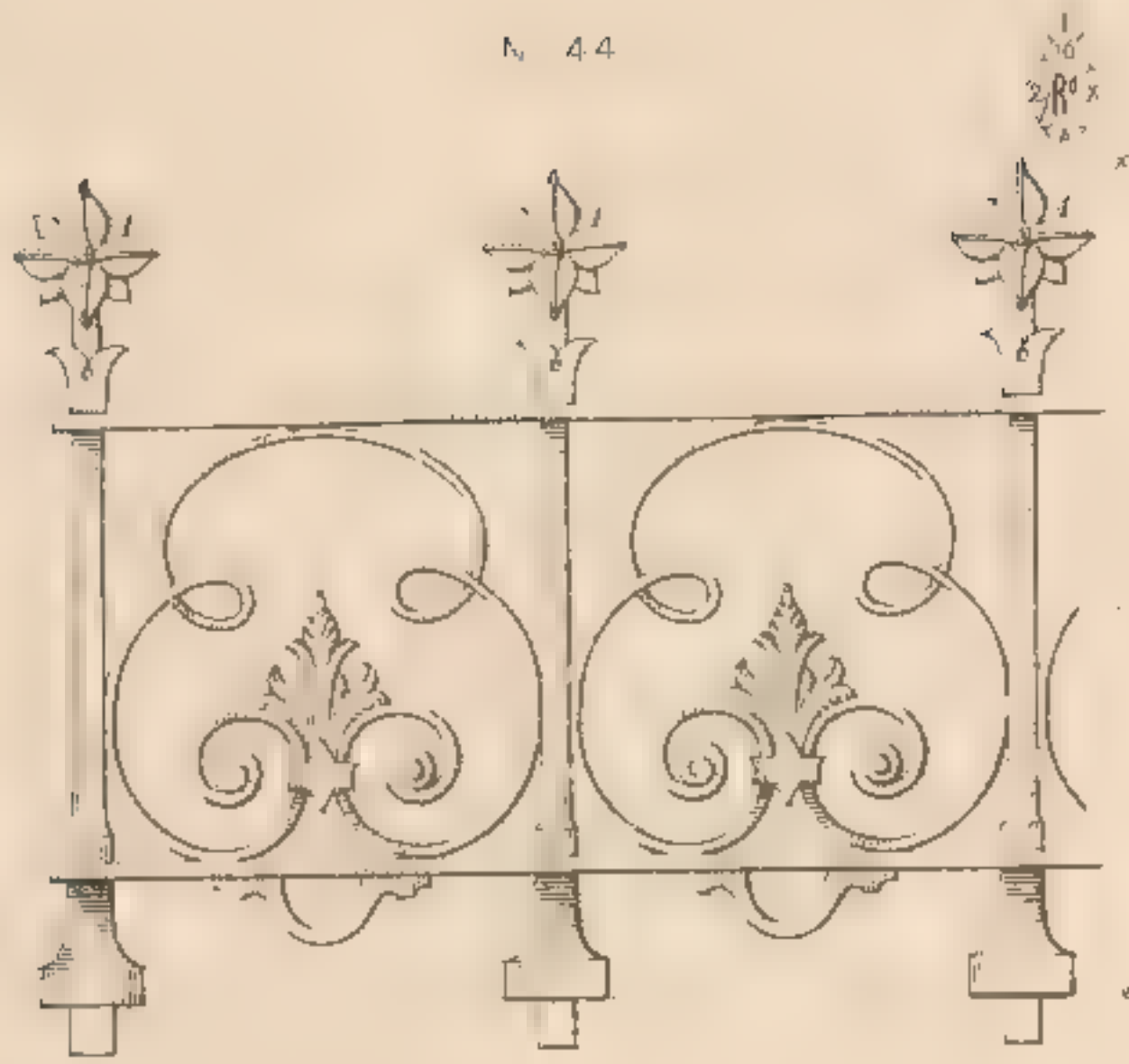
N^o 33



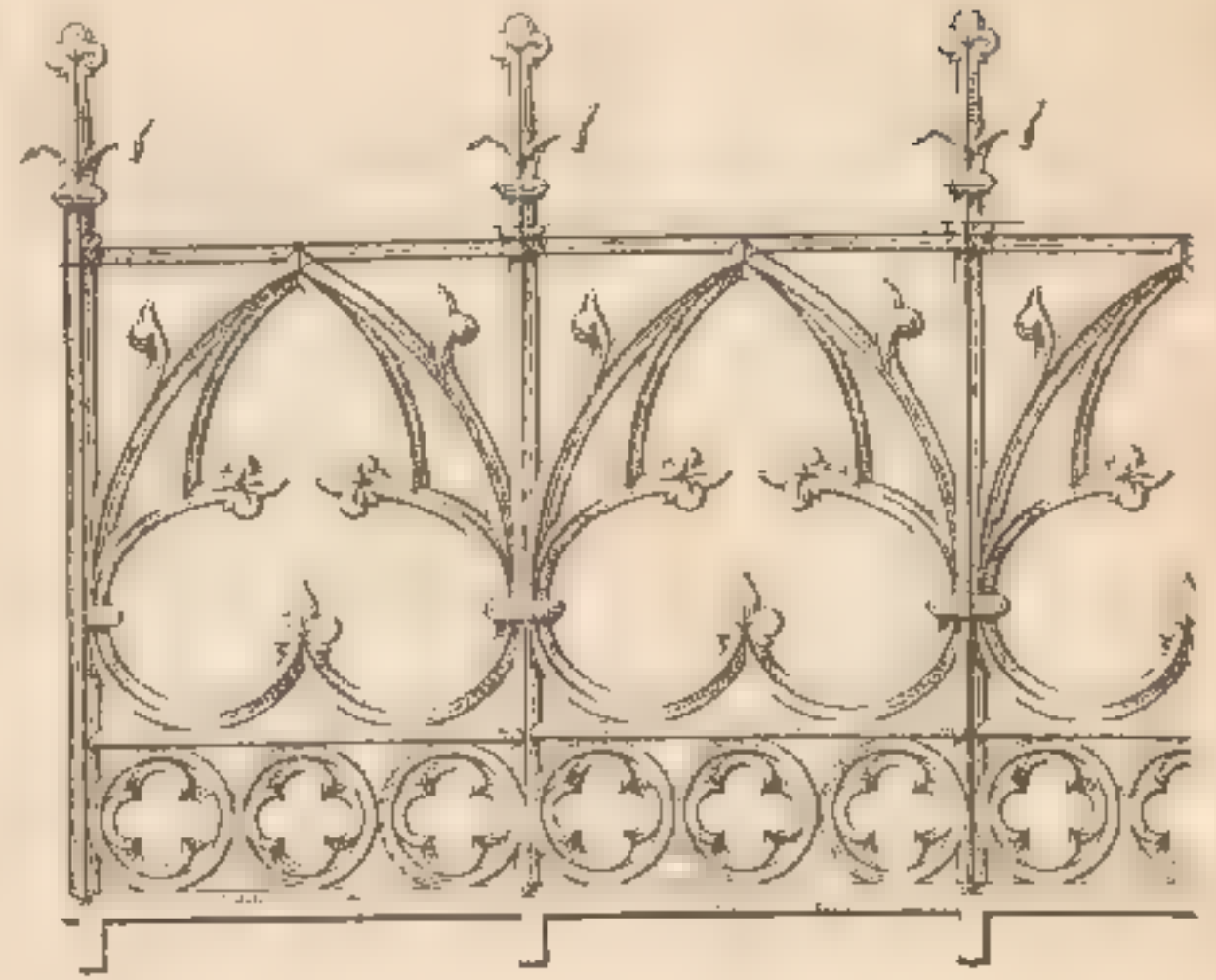
A E 10 T

MACFARLANE'S RAILING & C

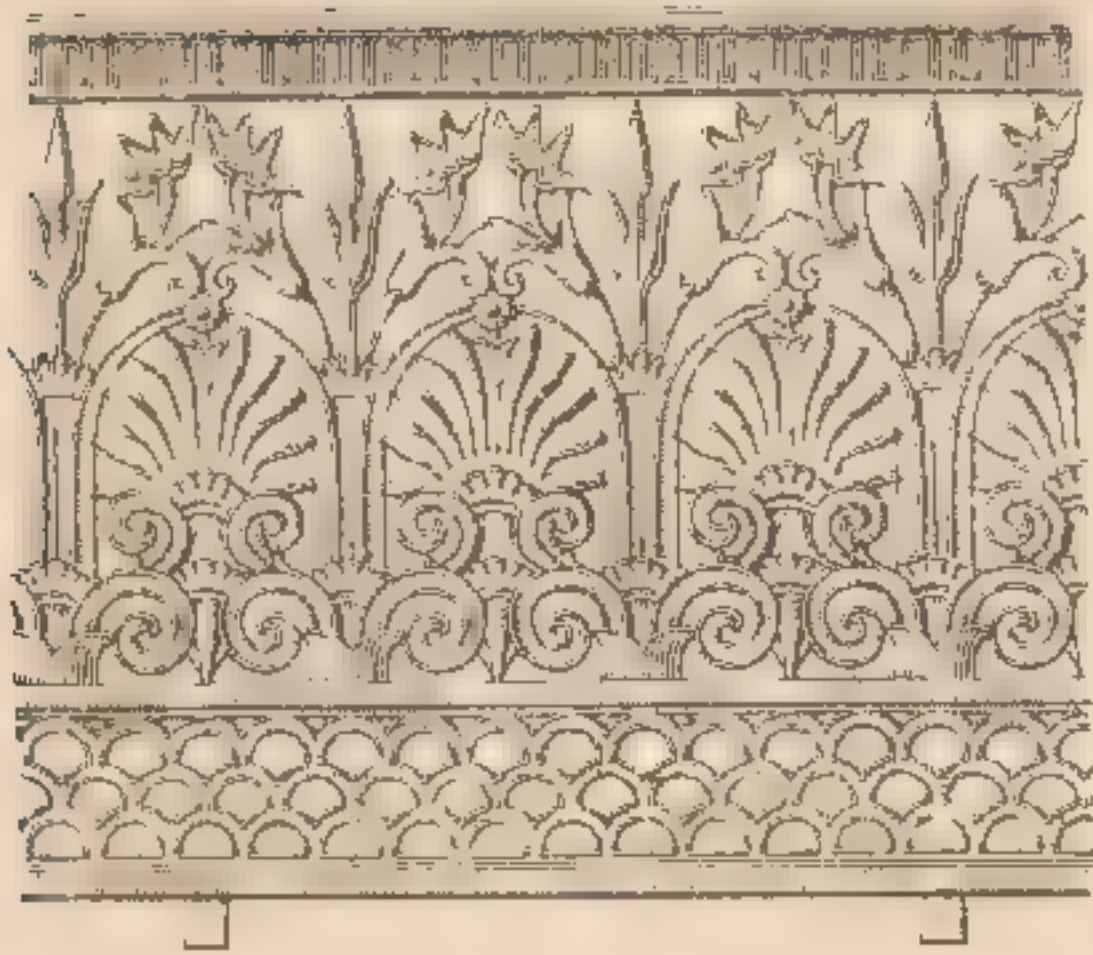
N. 44



N. 45



N. 47 with Handrail loos



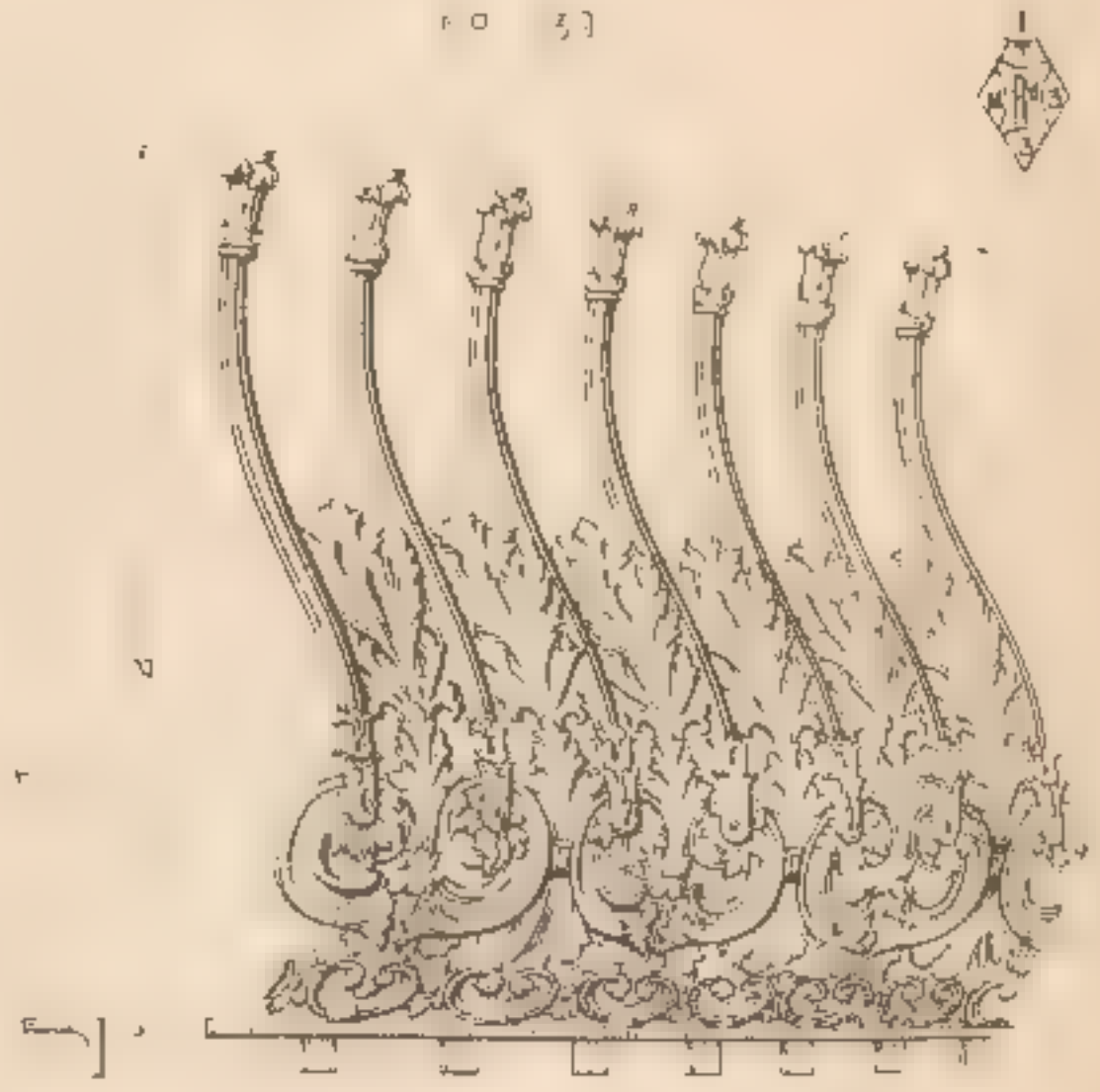
N. 48



N. 49

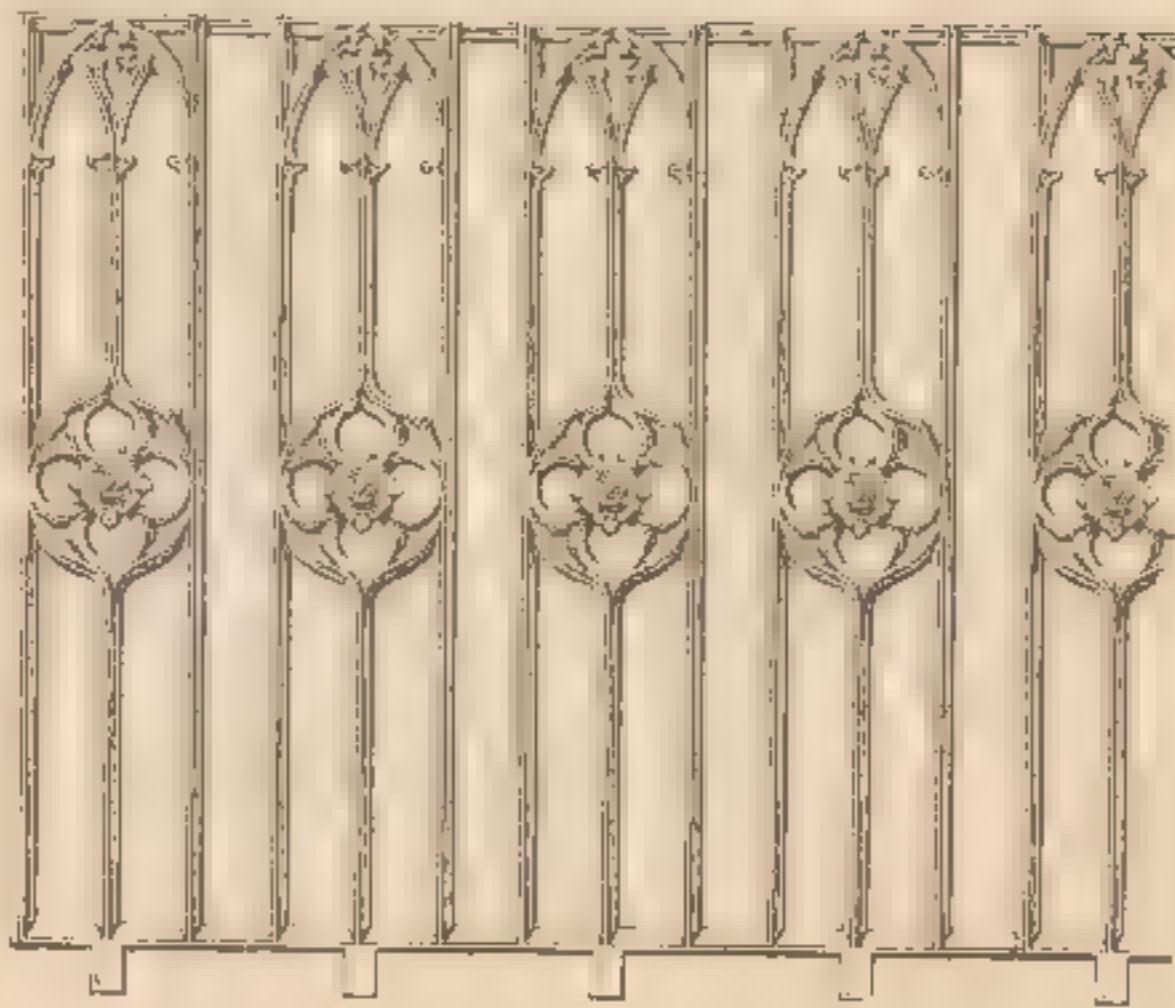
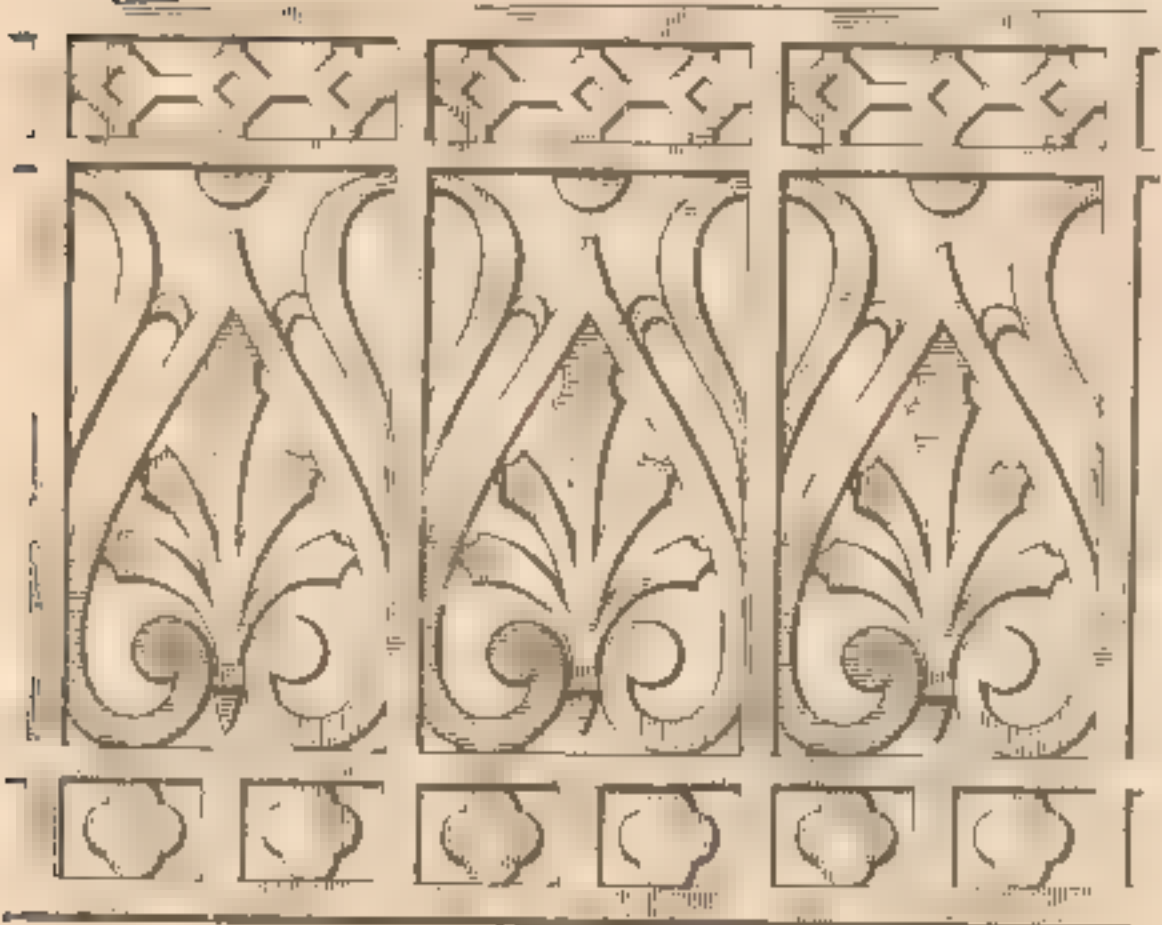
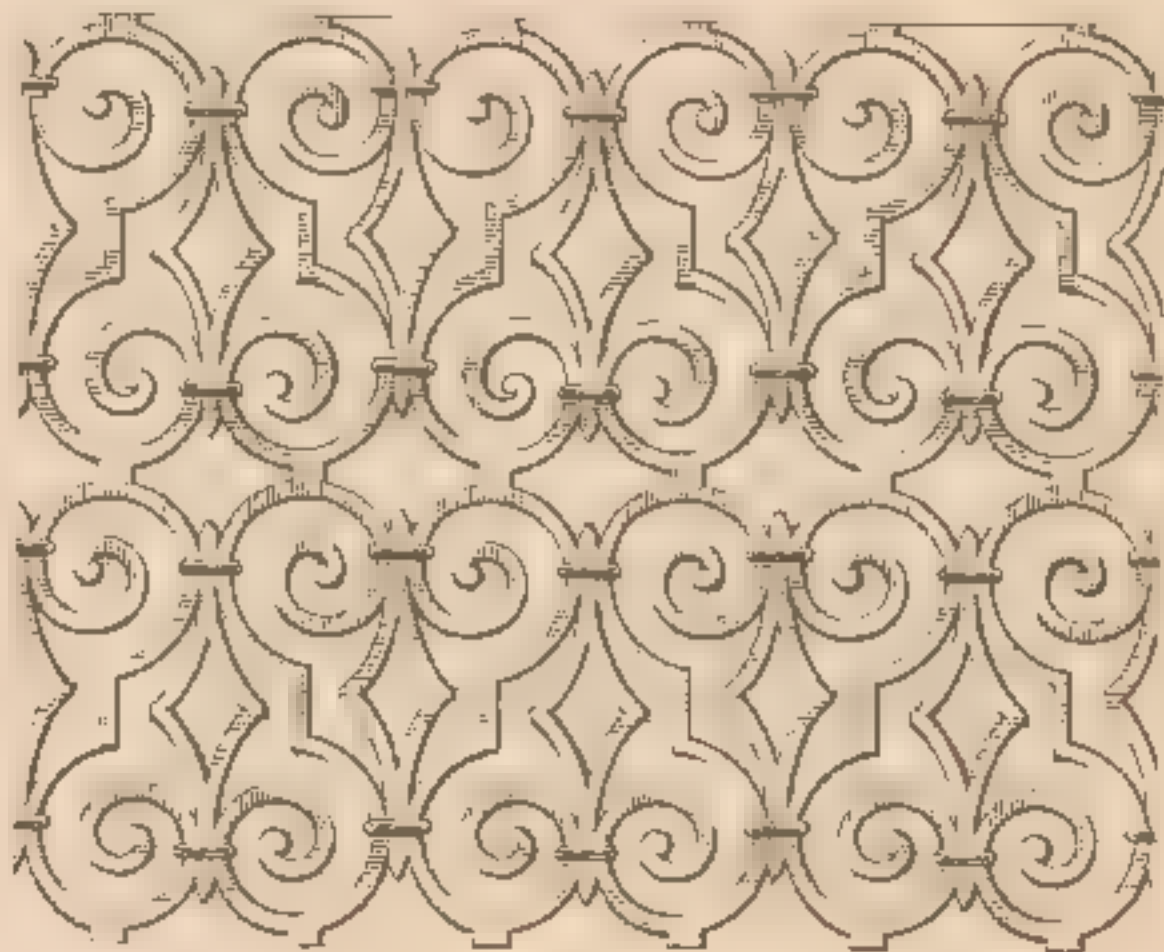


N. 50

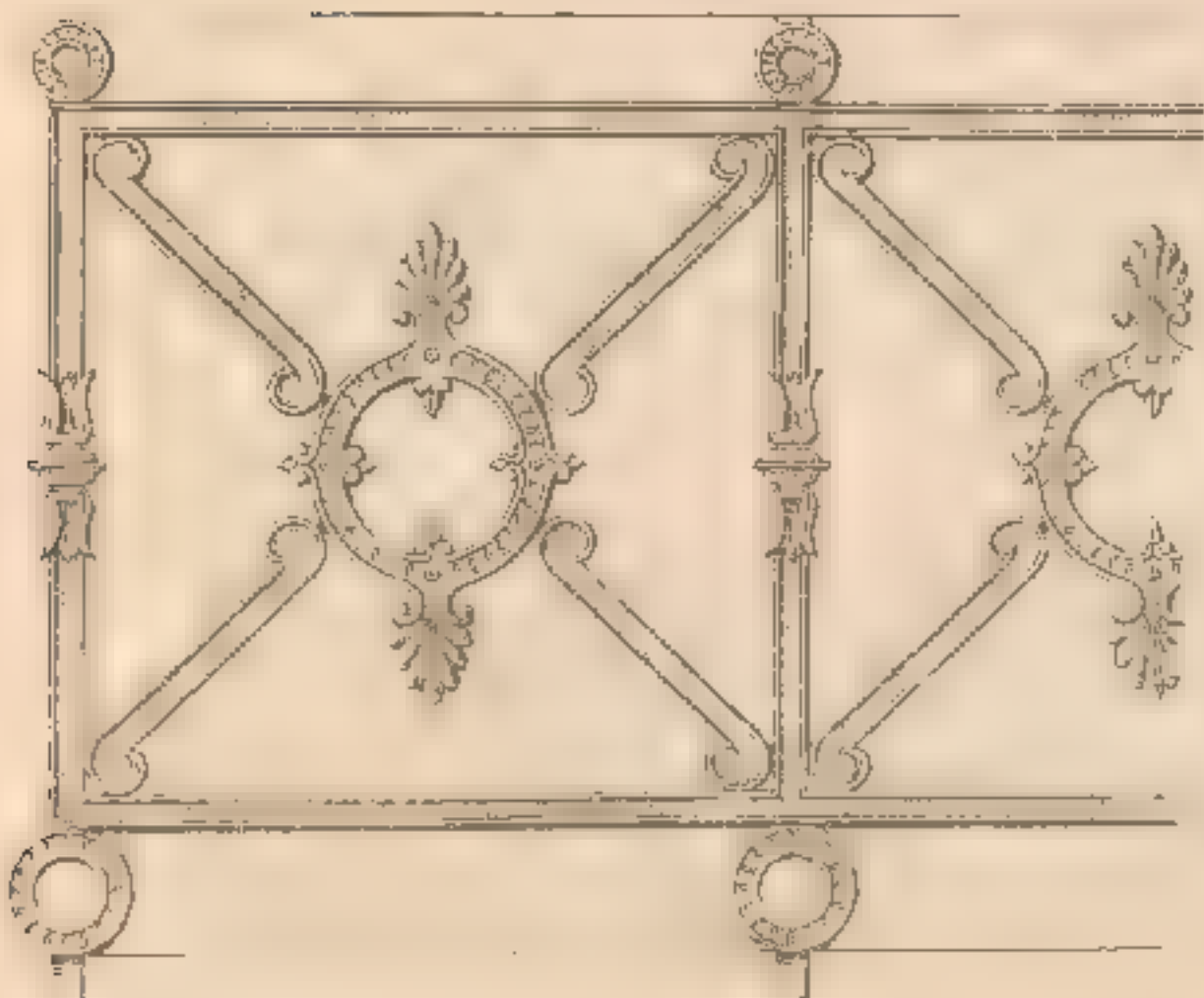
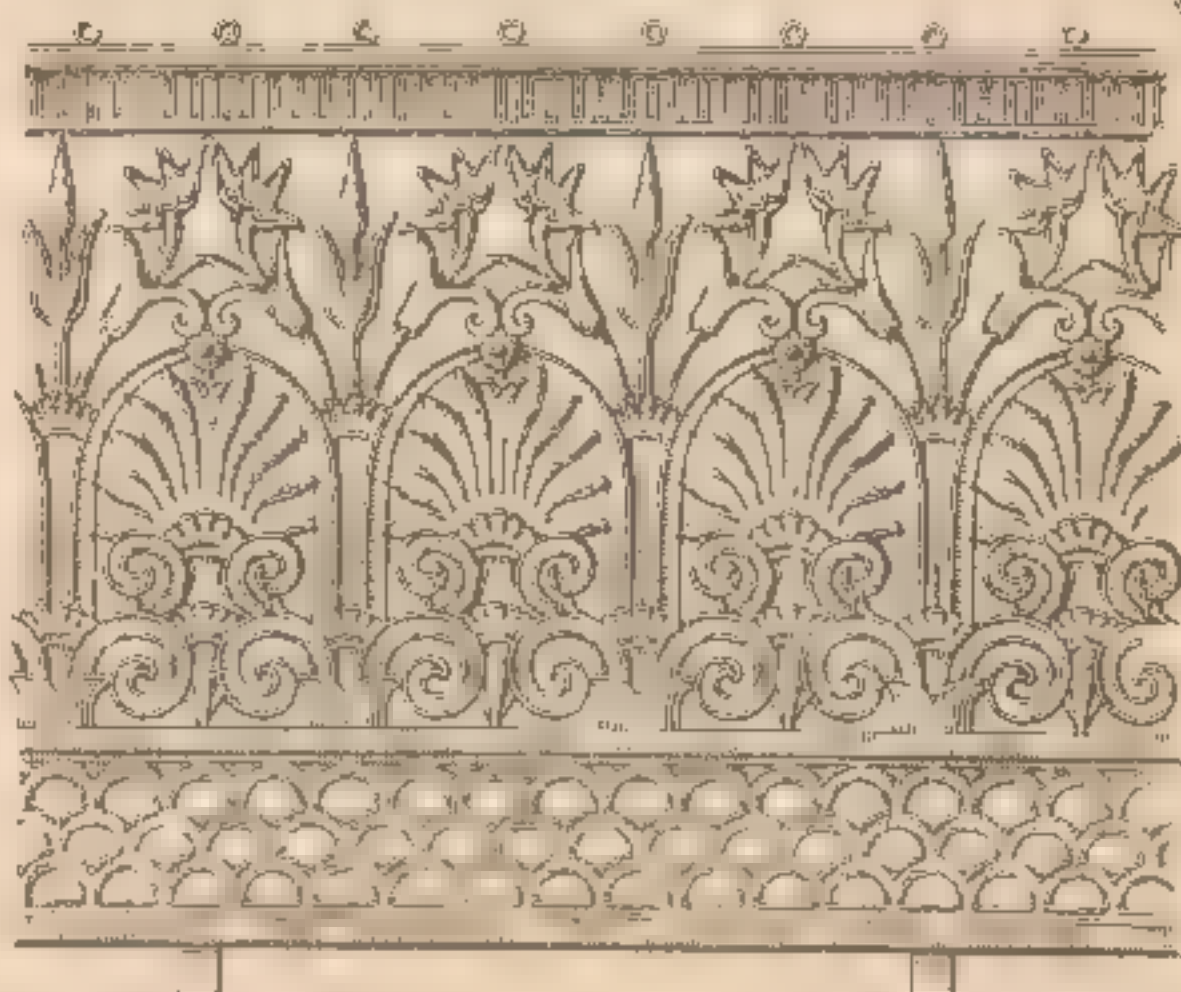


One face

MACFARLANE'S RAILING &C

N^o 37.N^o 374N^o 3E.P. 3
7N^o 293

28 thick
Any size made to order.

N^o 336N^o 57 with No. 8 Handrail, loose.

SCALE 1 INCH = FOOT

MACFARLANE'S RAILING & CO

No 50

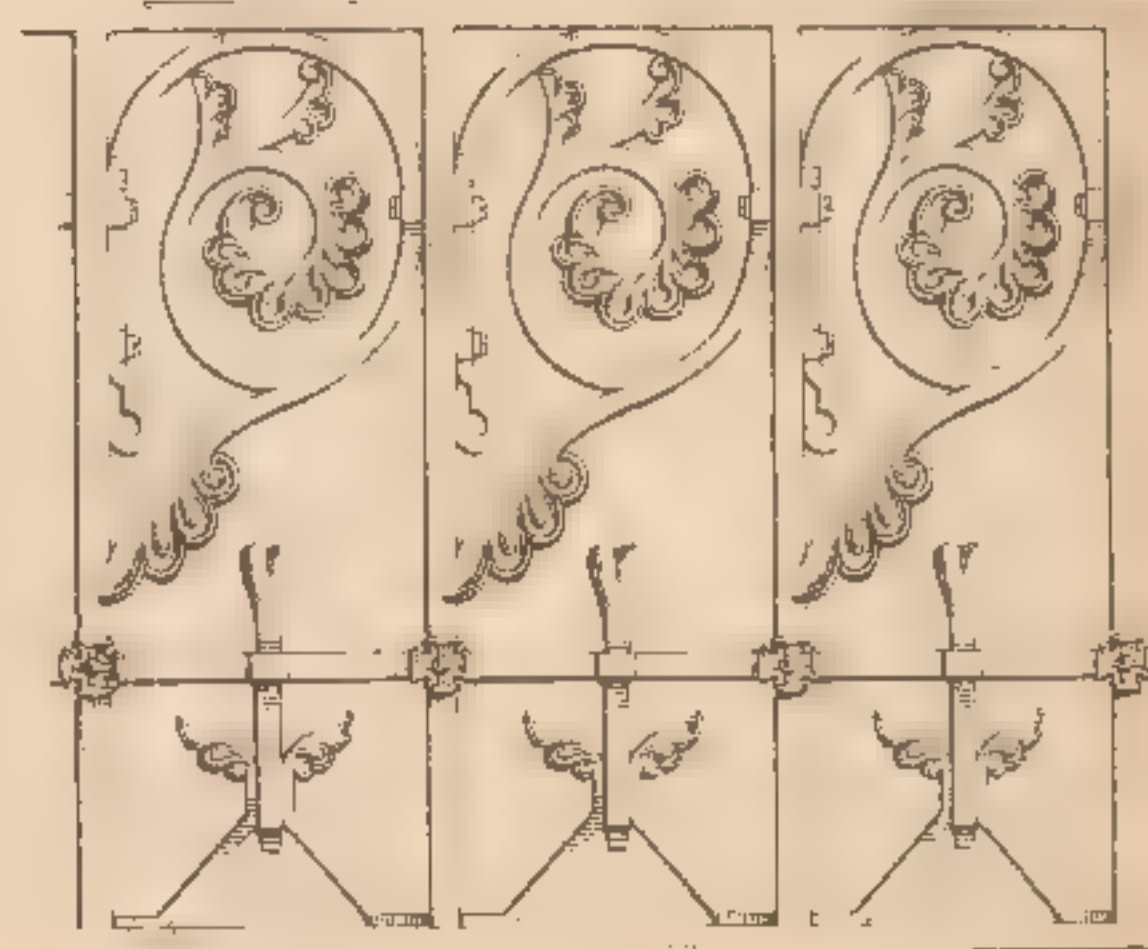


No 184

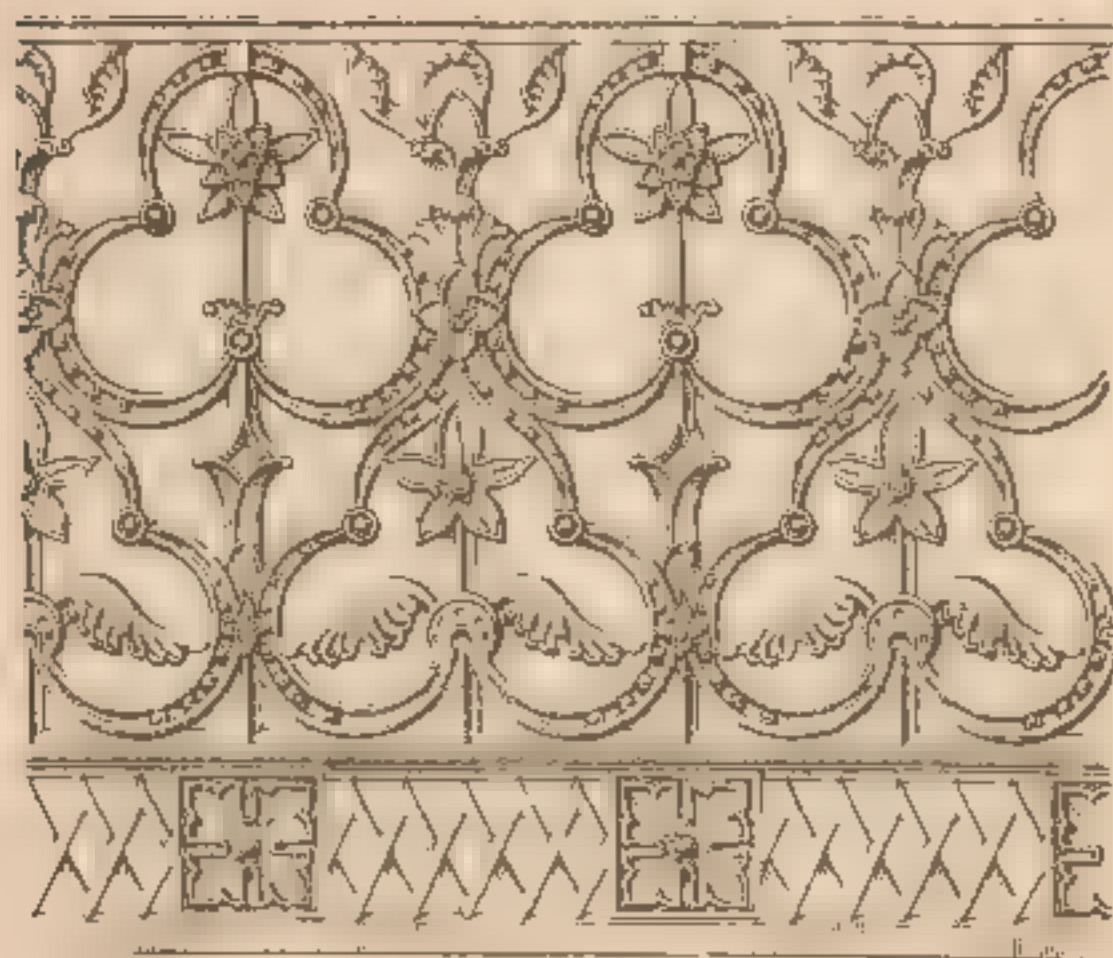


Standards (see No. 140 Final 3' 6") charged extra.

No 19



No 17



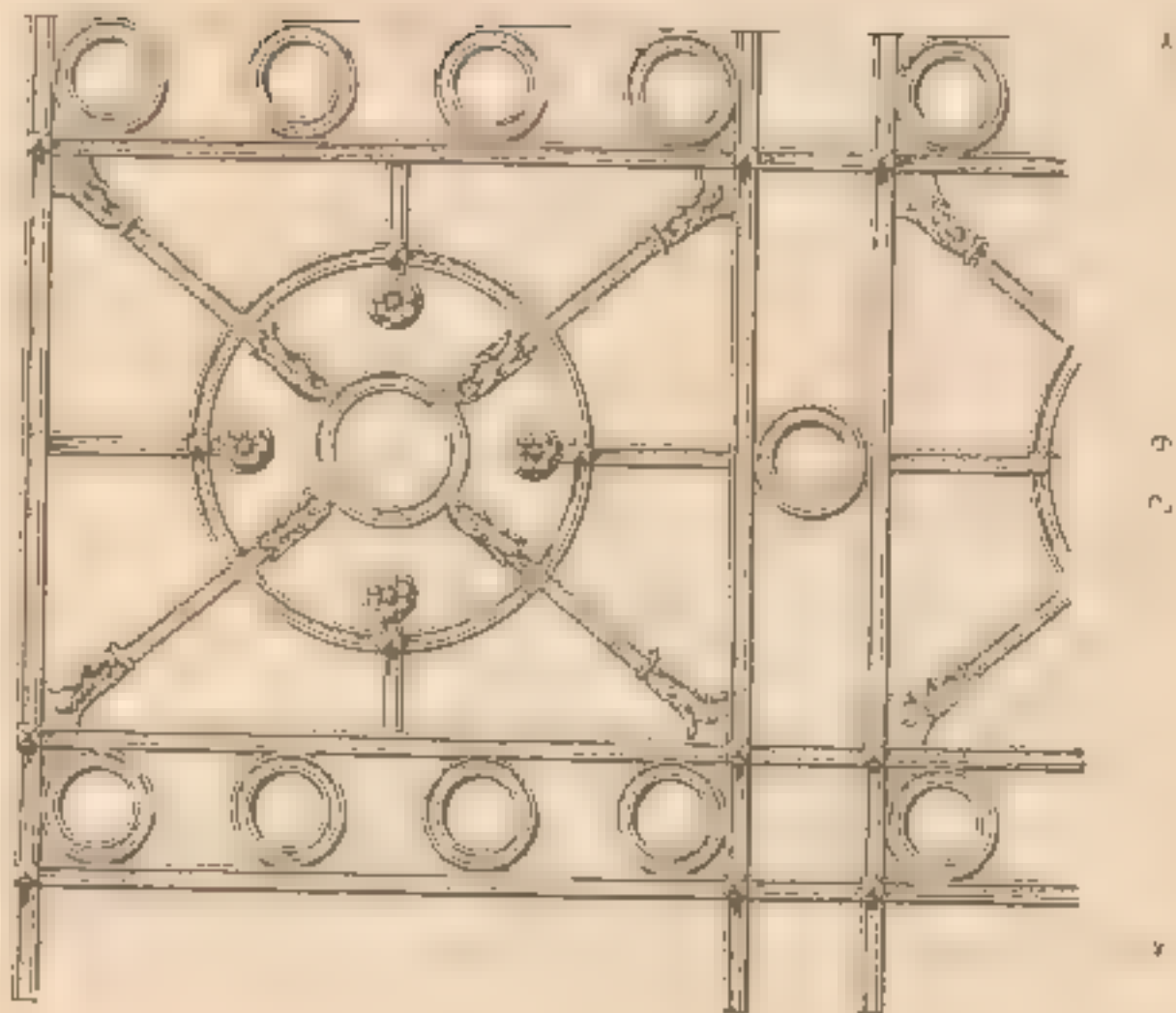
No 36



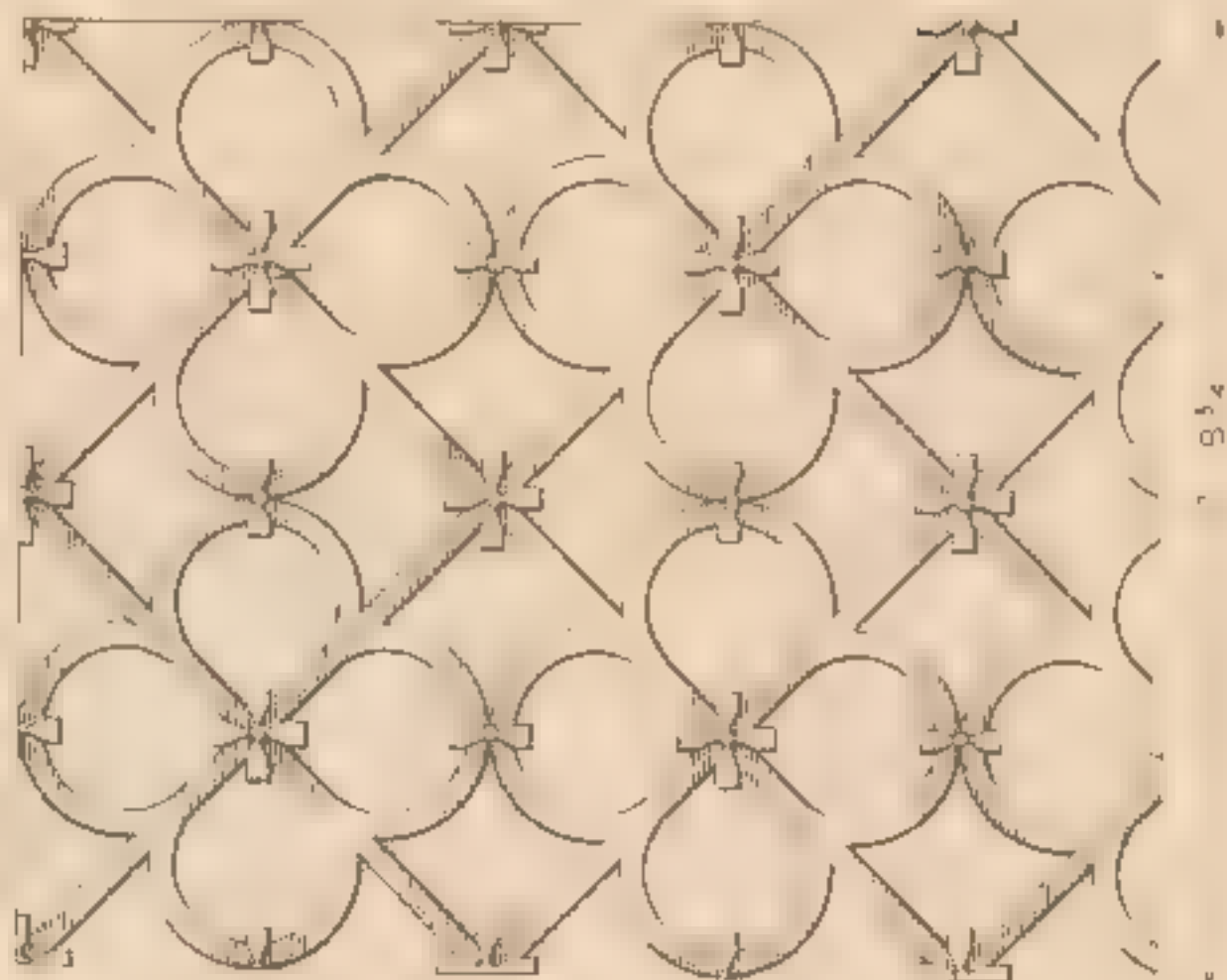
SCALE INCH - 1 FOOT

MACFARLANE'S RAILING & CO

Nº 306

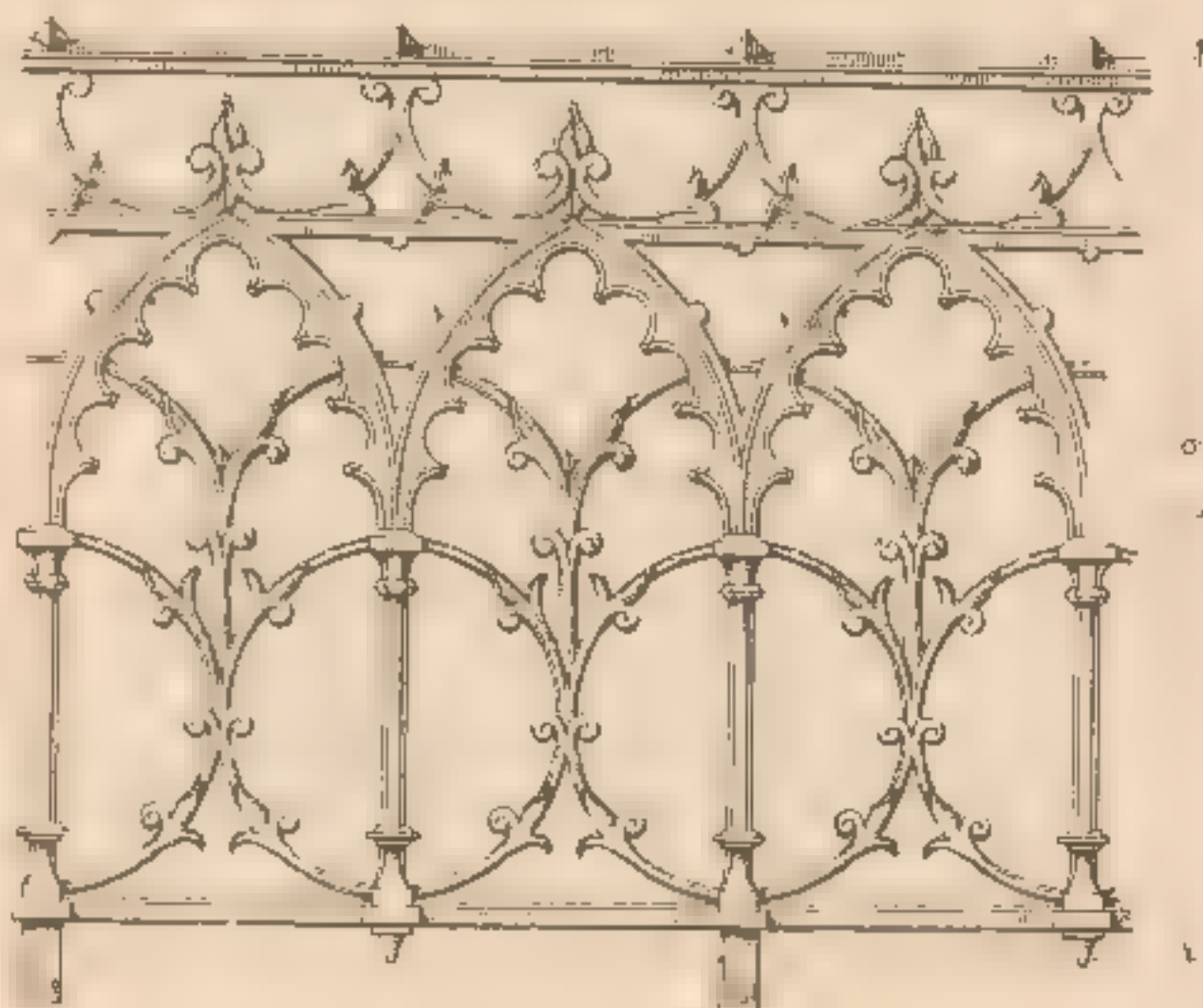


Nº 418

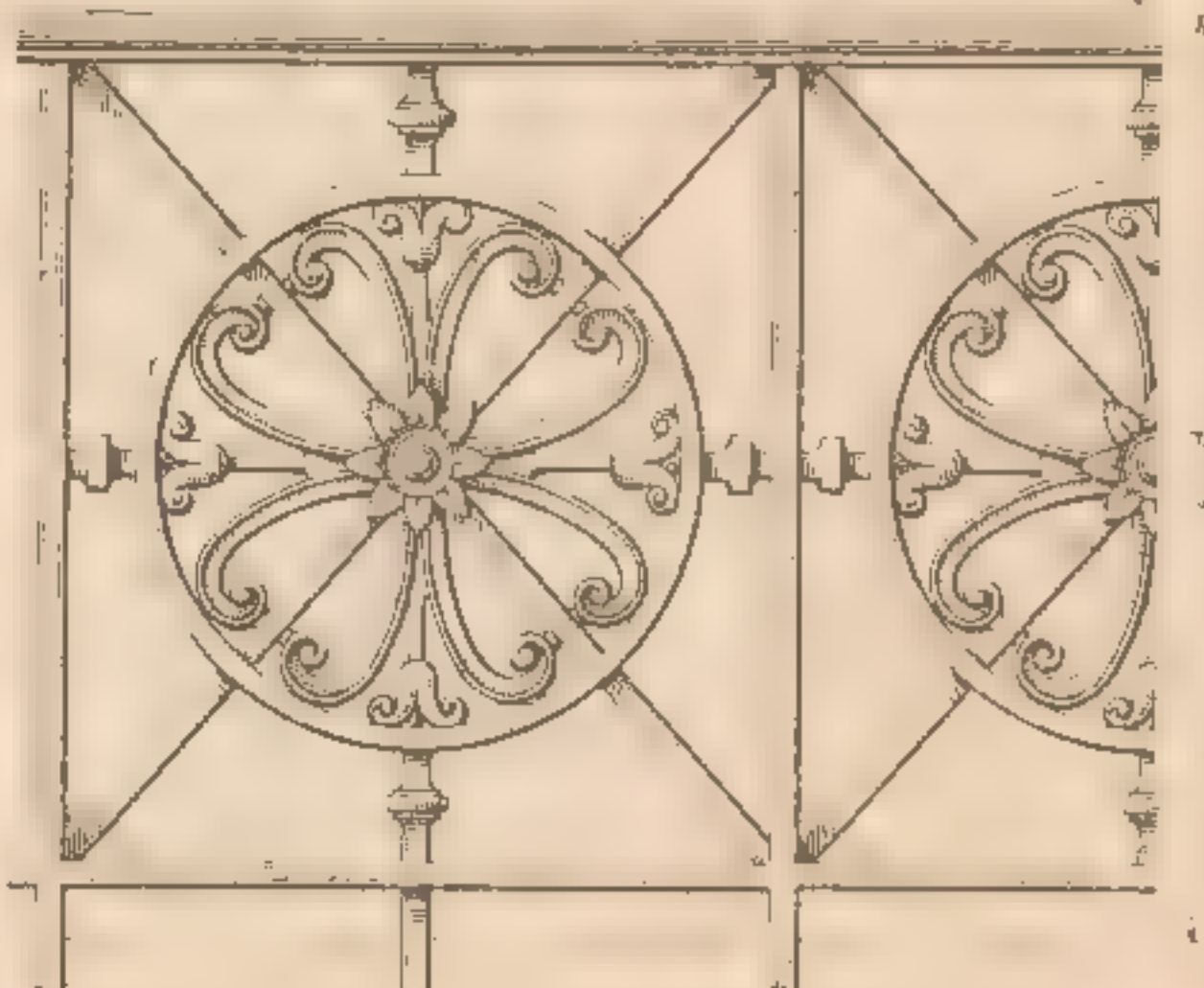


$\frac{5}{8}$ thick
Any size made to order.

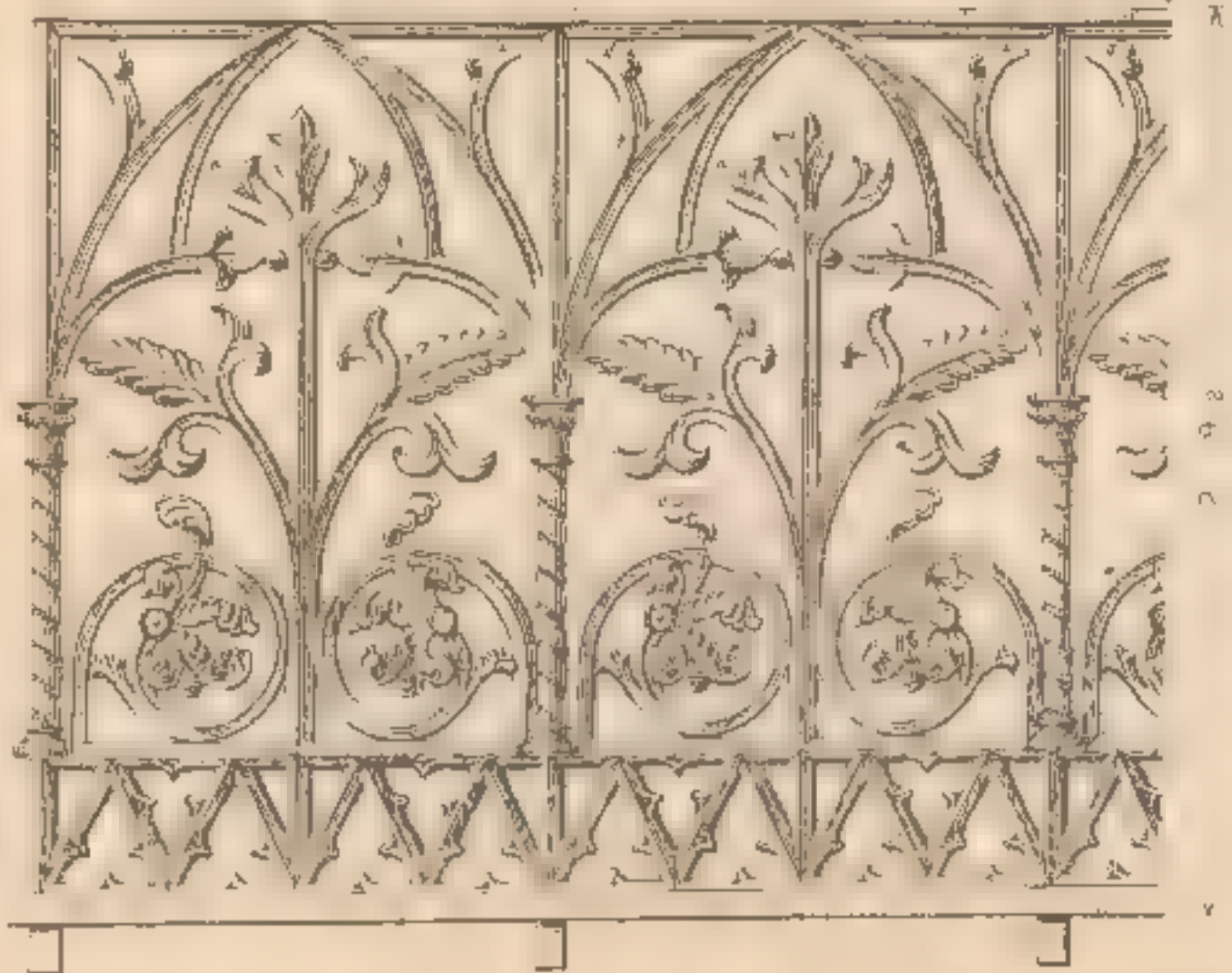
Nº 52



Nº 32



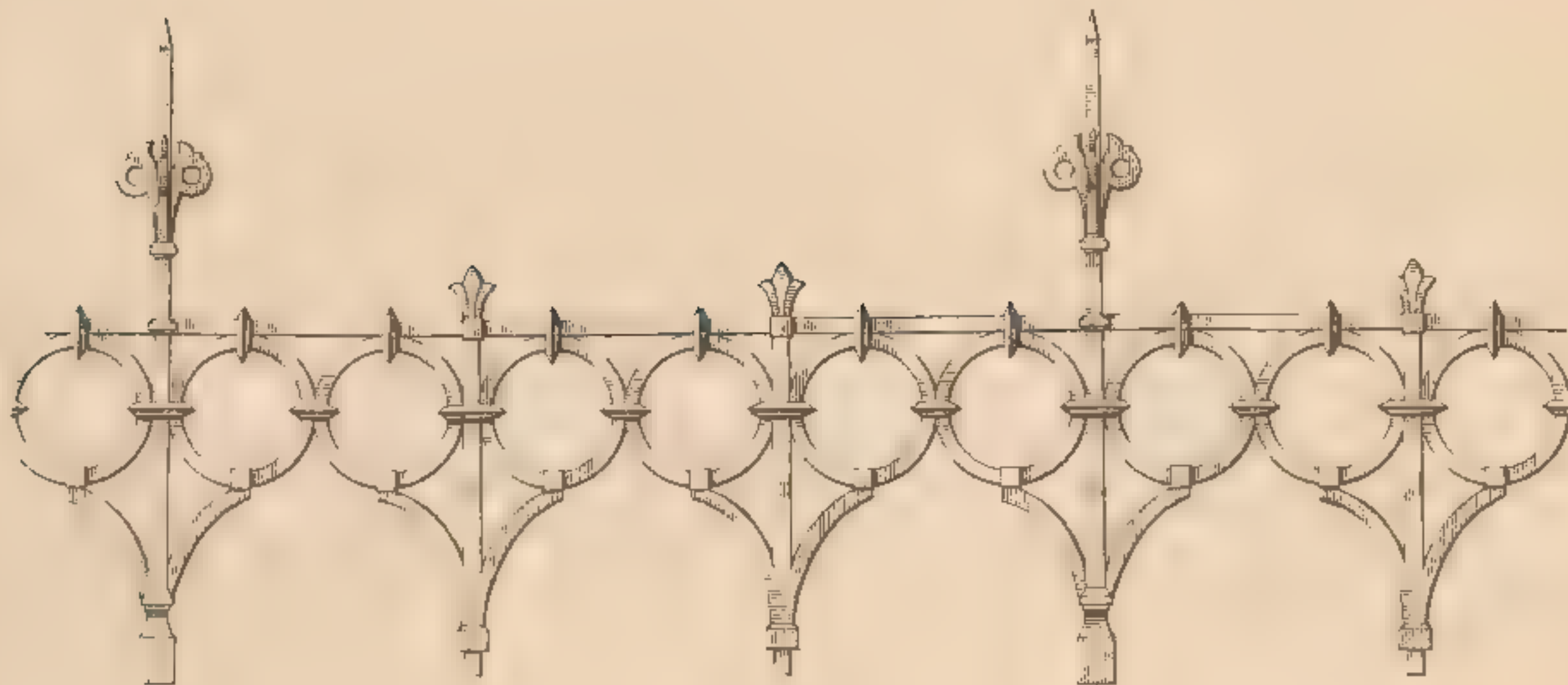
Nº 83



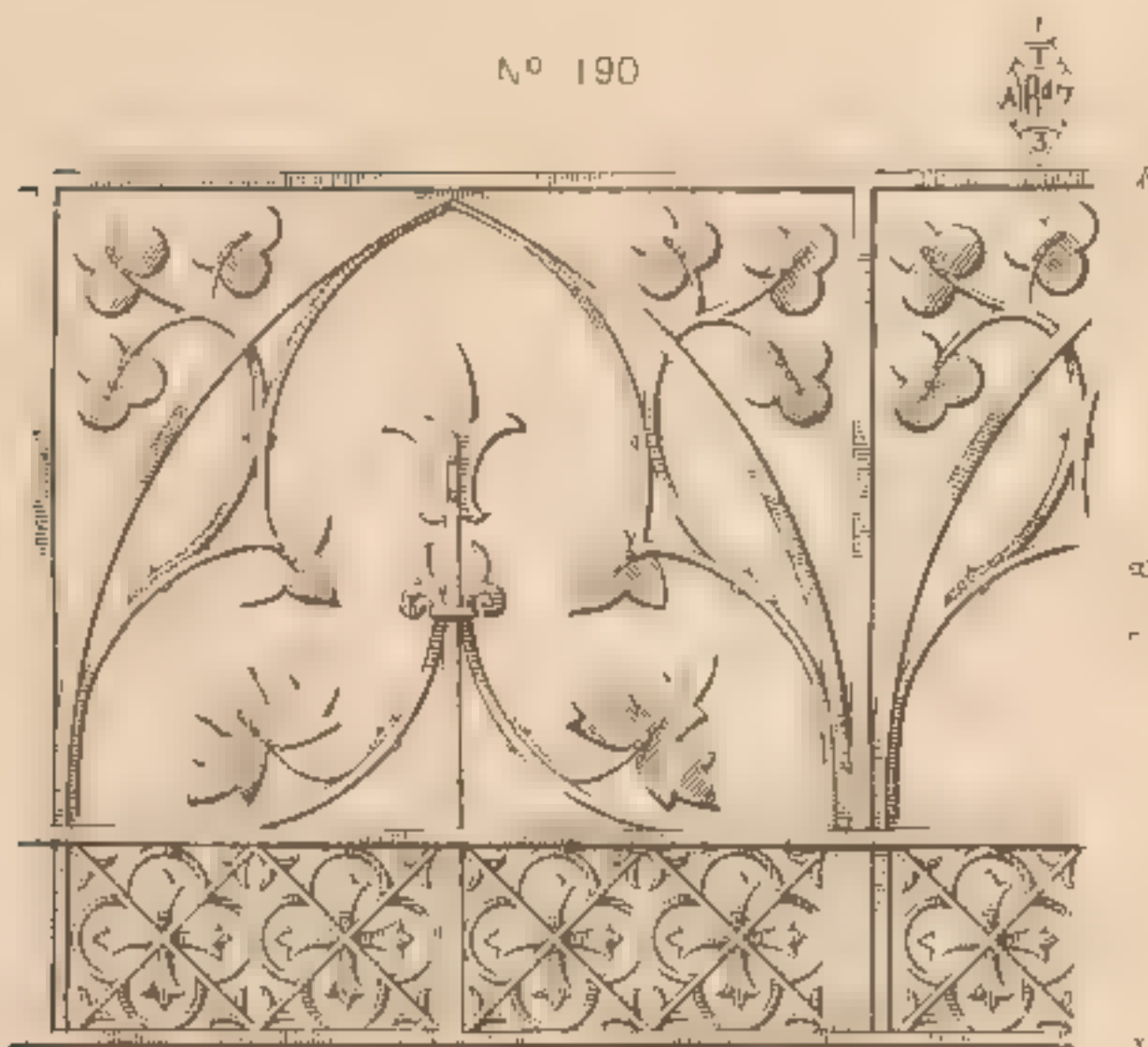
Nº 207



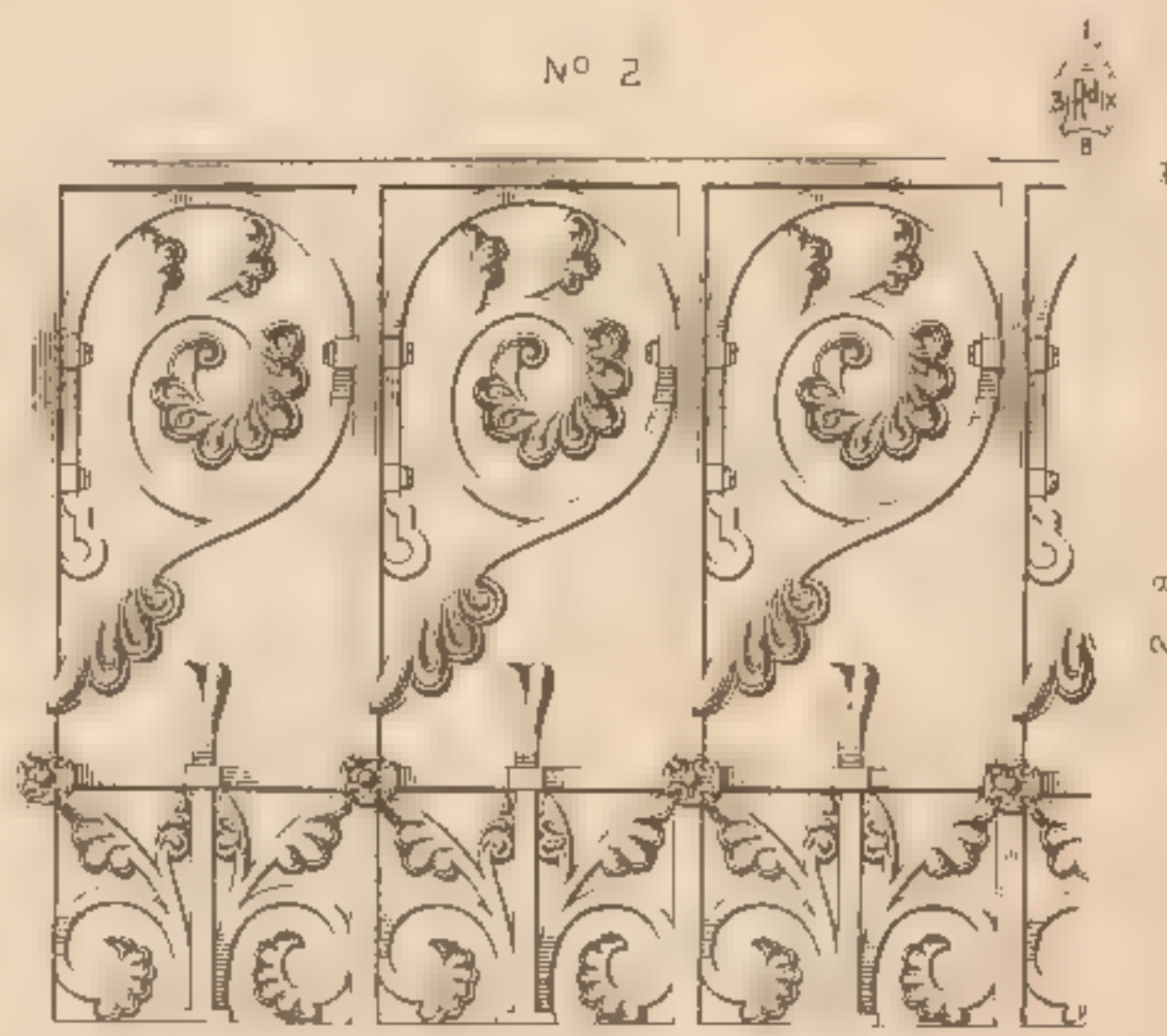
No 136



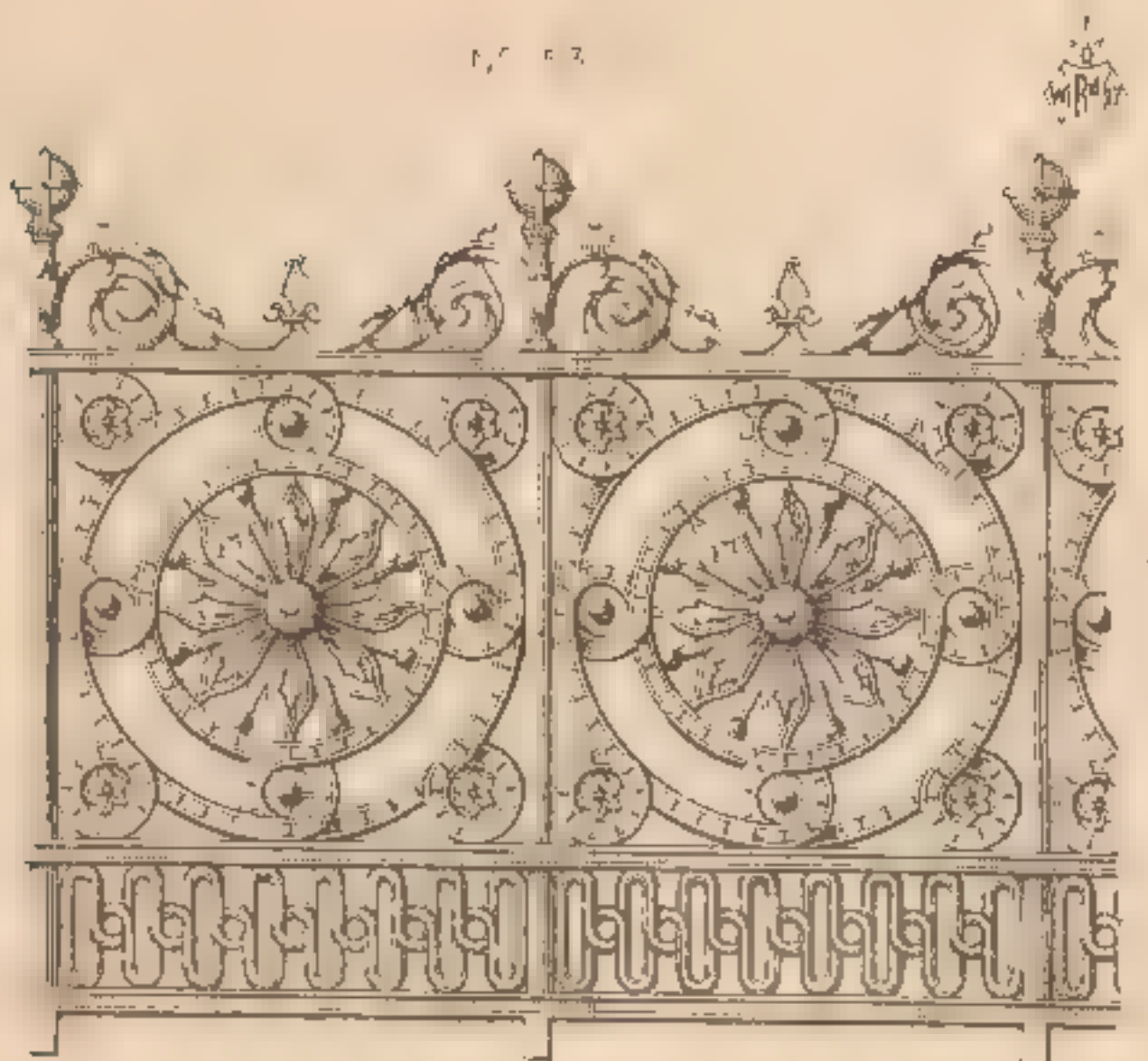
No 190



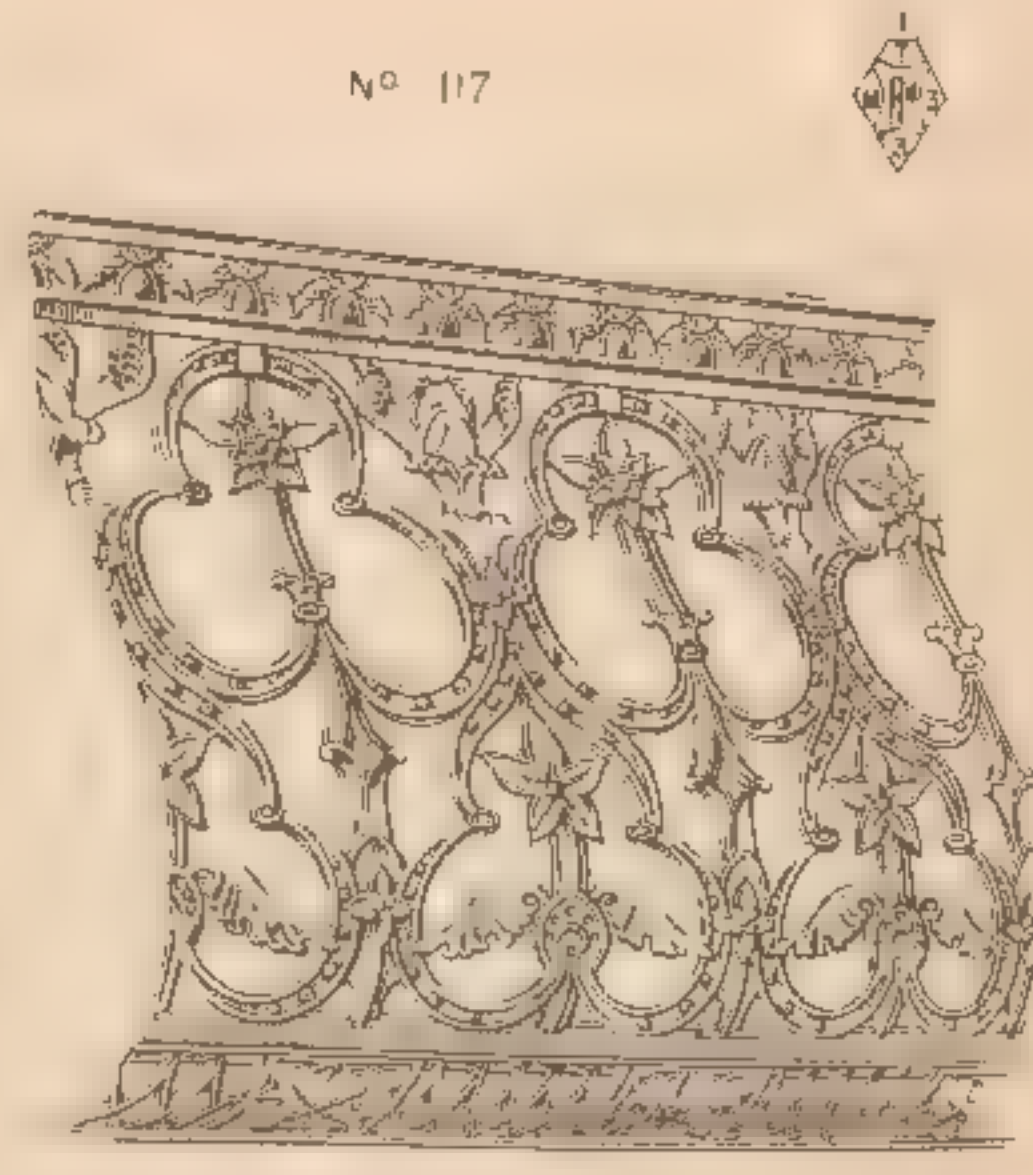
No 2



No 117



No 117



One face

SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING & CO

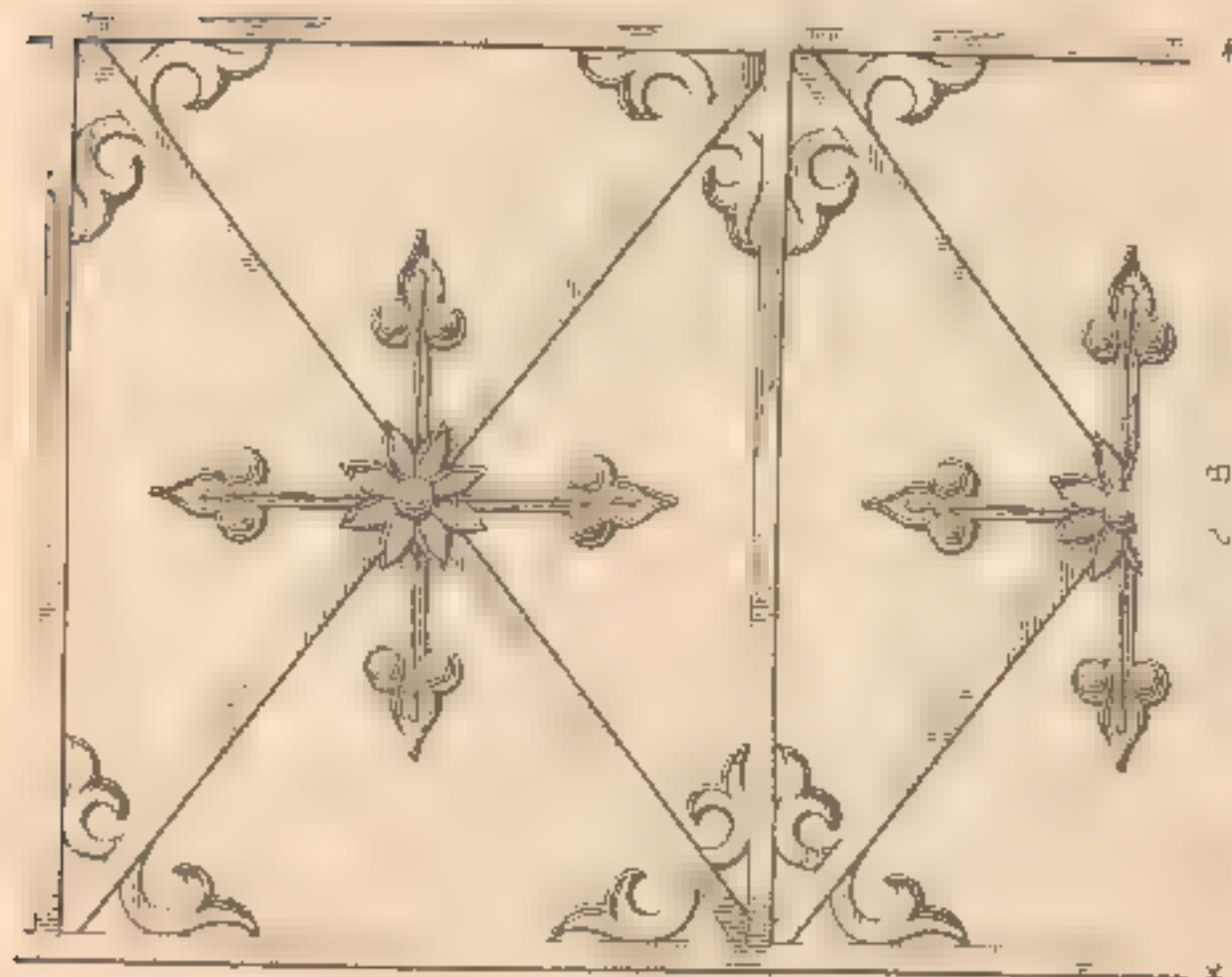
N^o 42



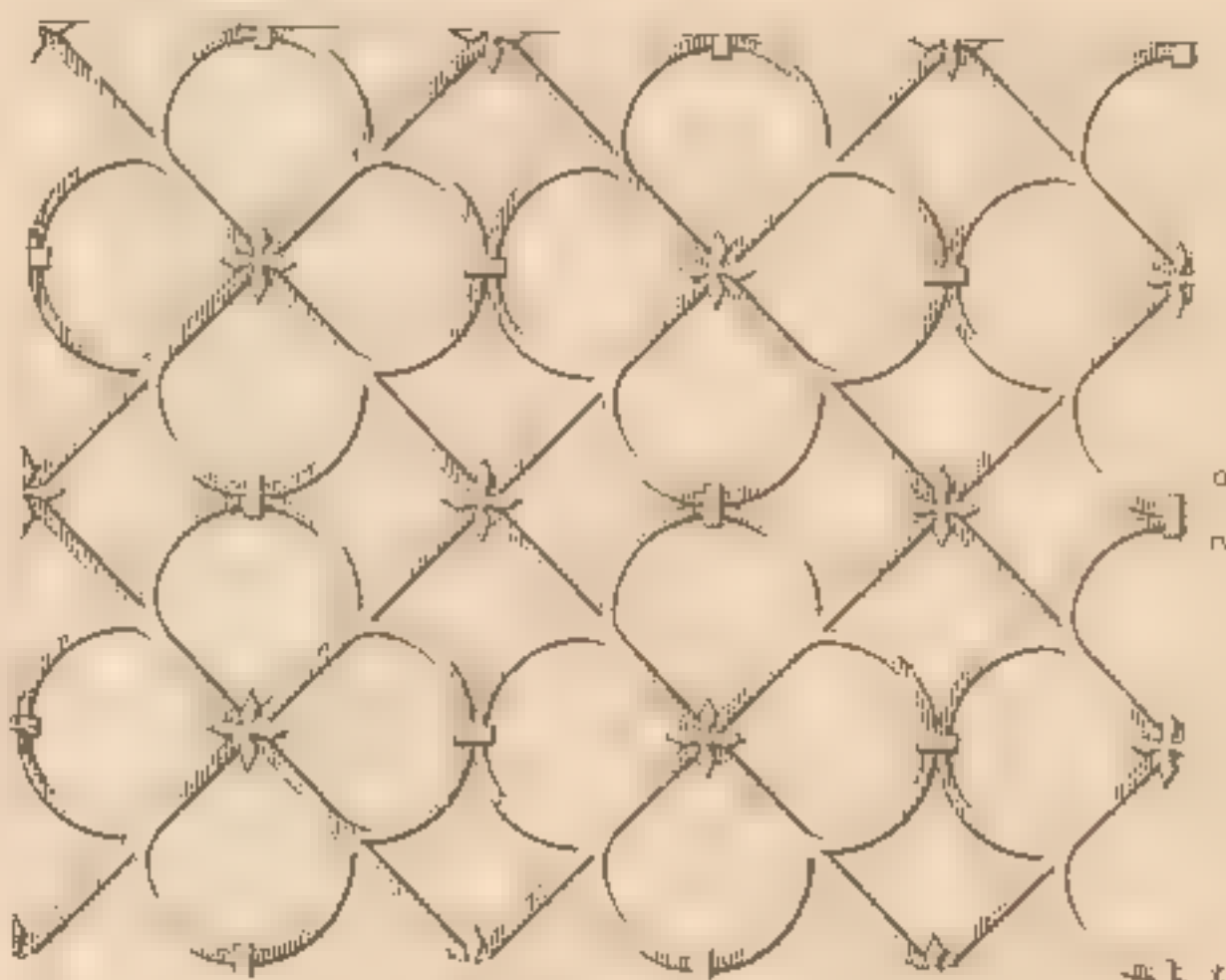
N^o 2



N^o 209

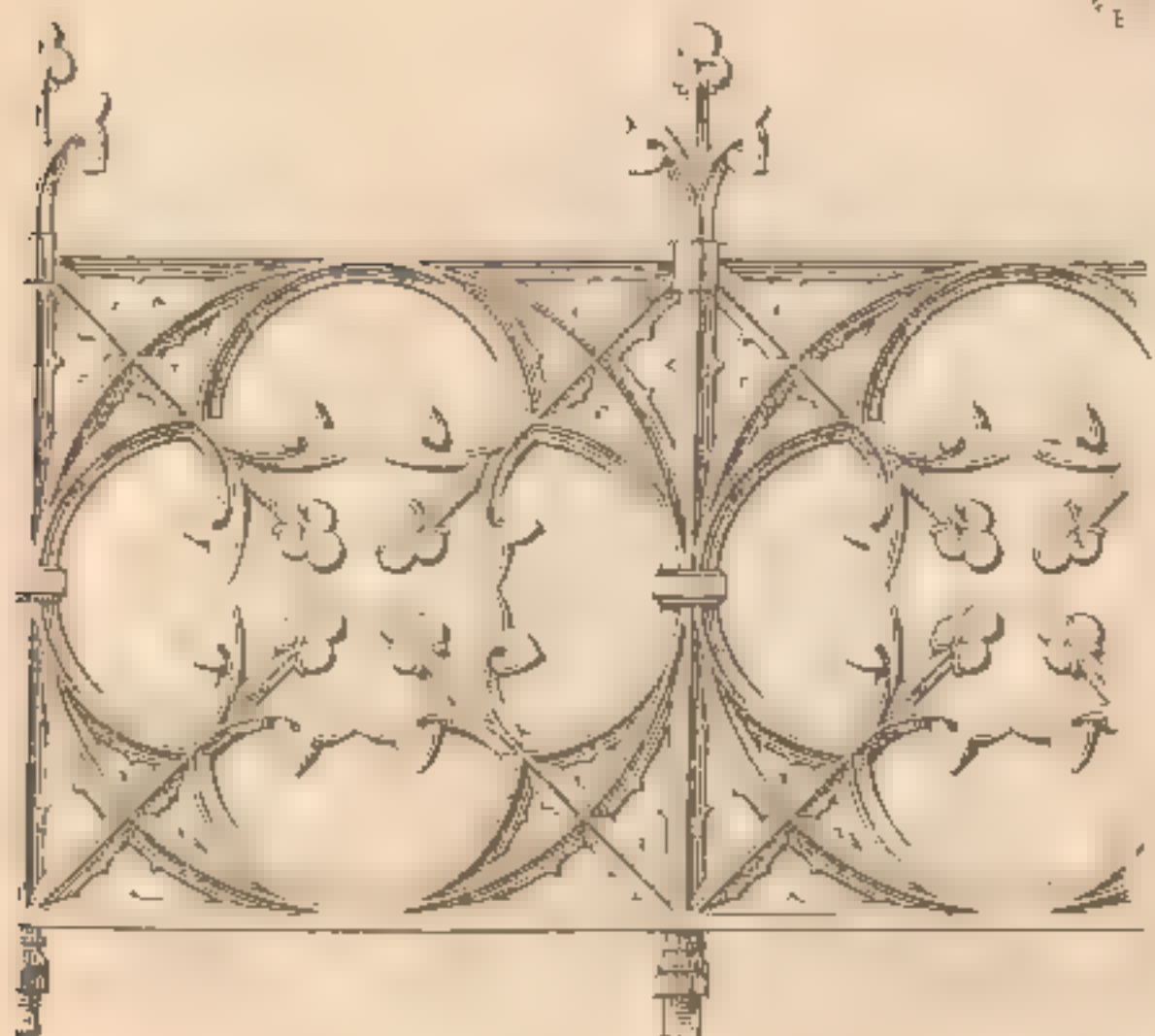


N^o 38

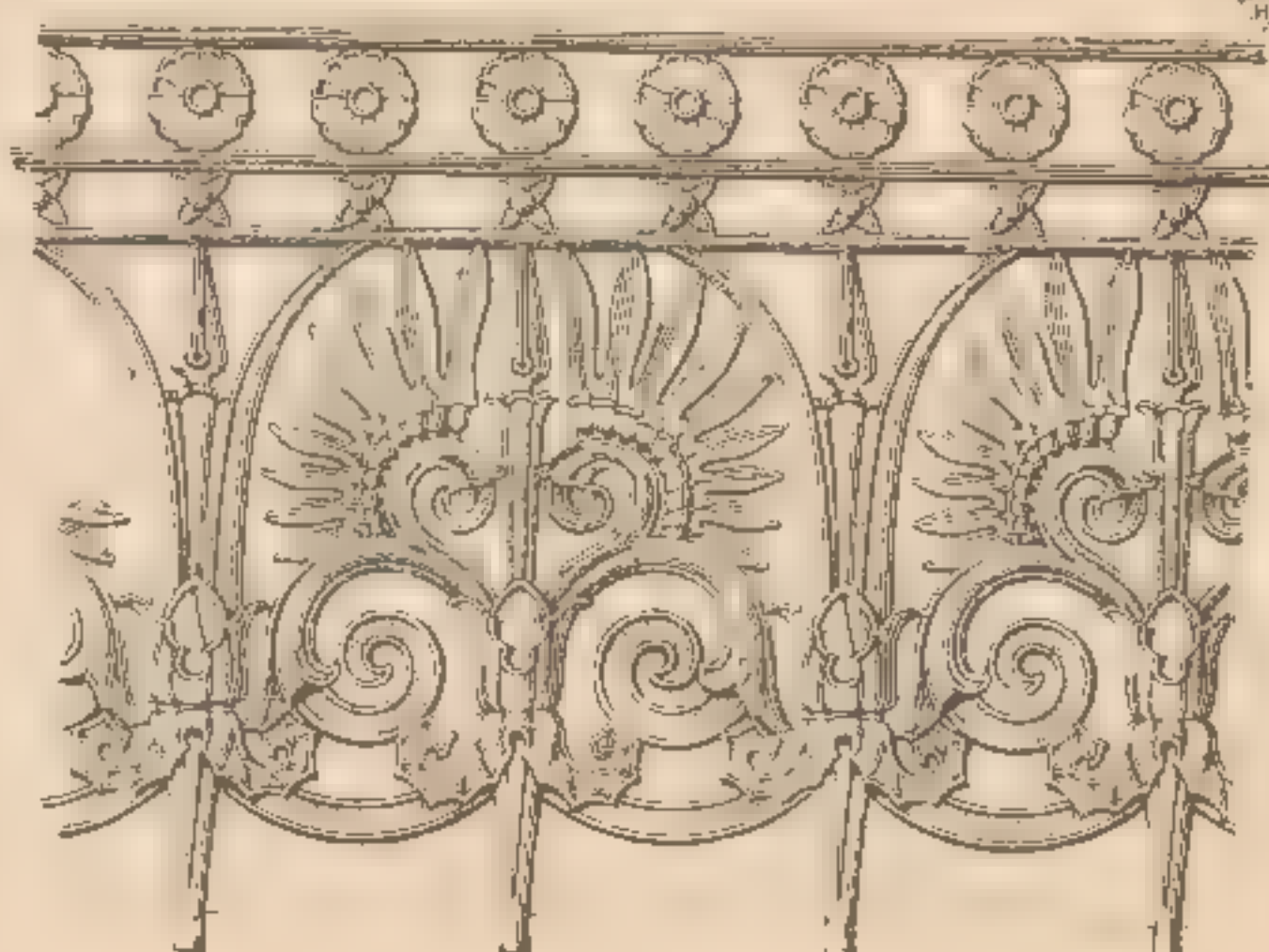


Any size to order.
One face.

N^o 23



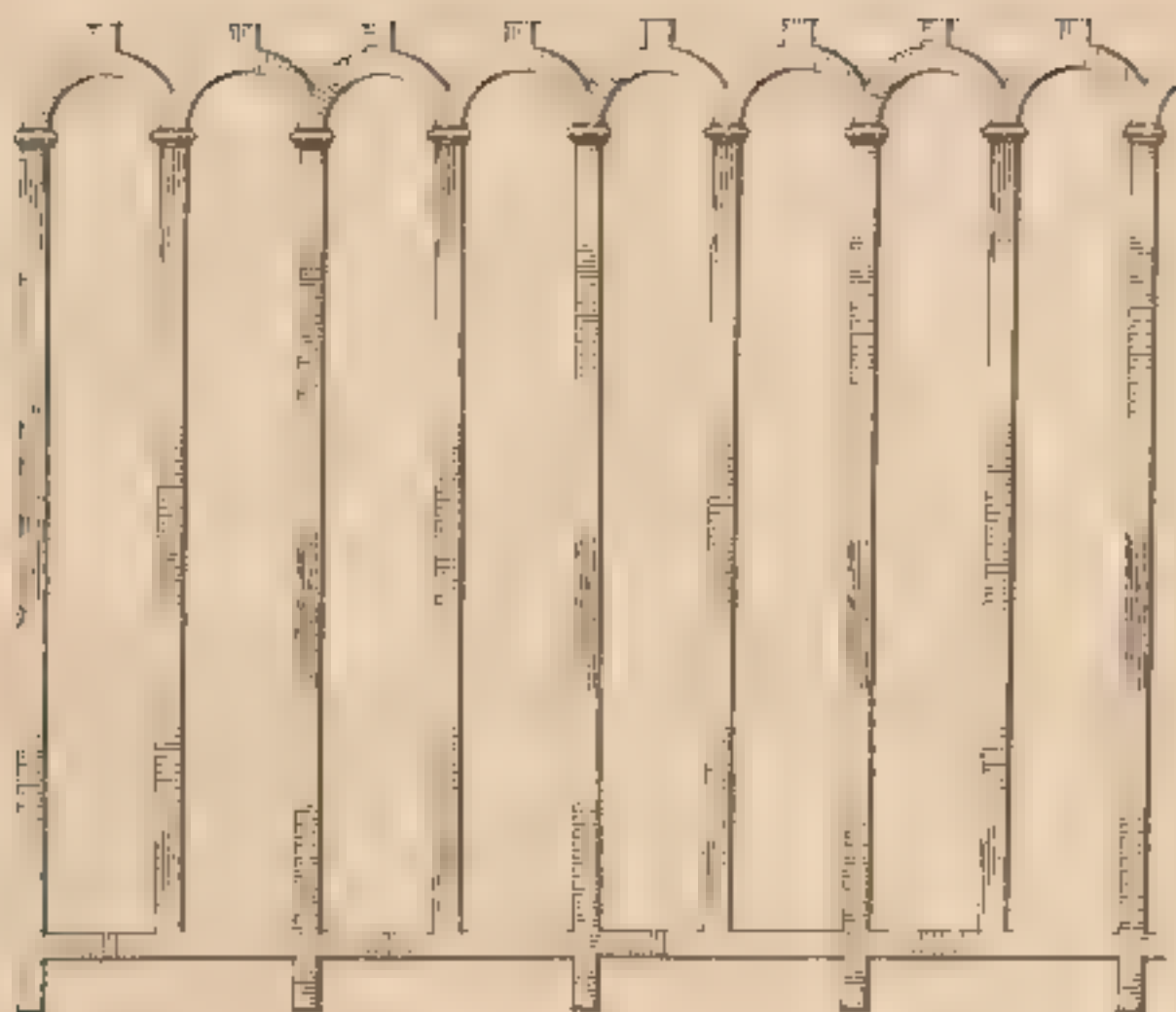
N^o 29



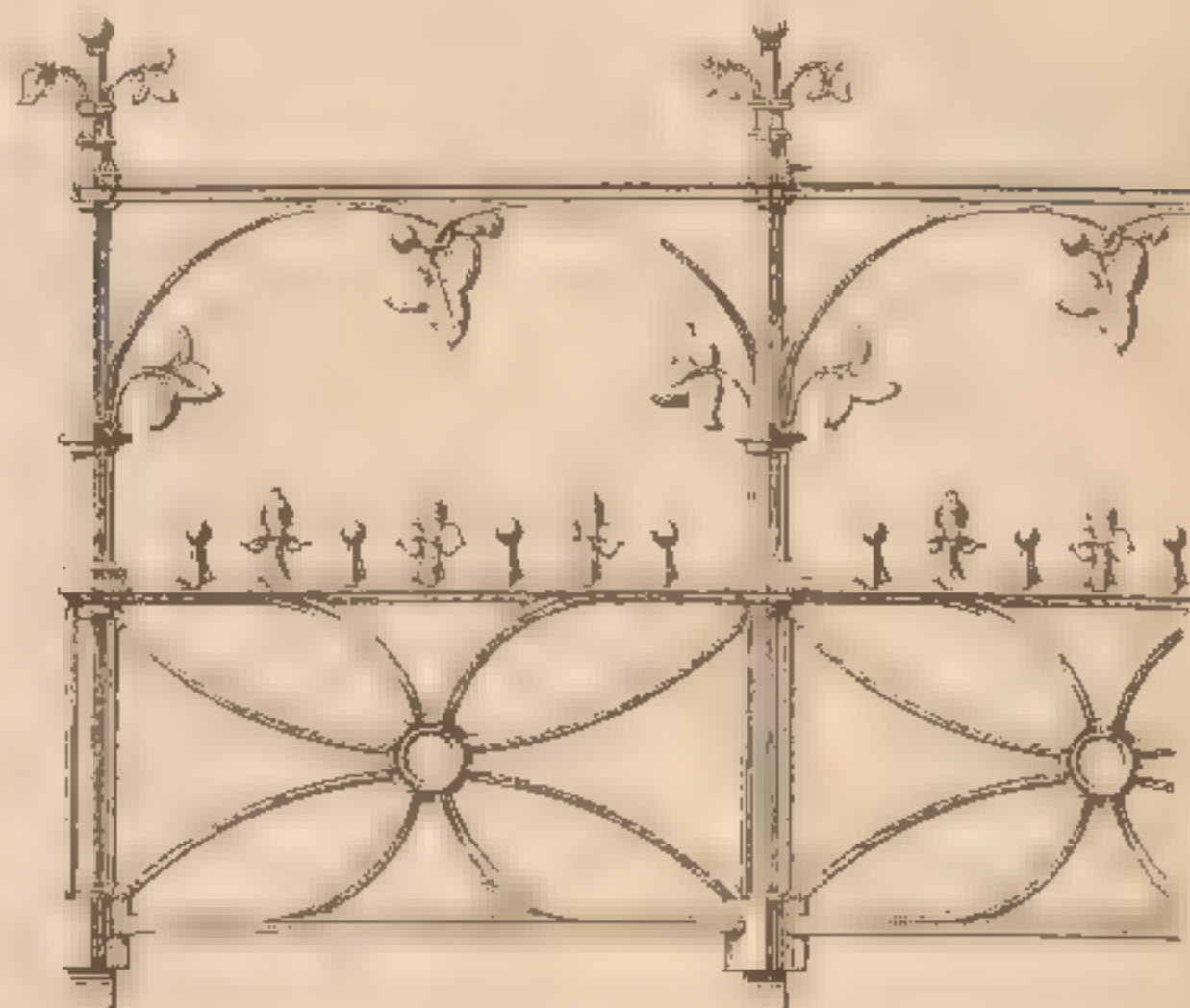
SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING & CO

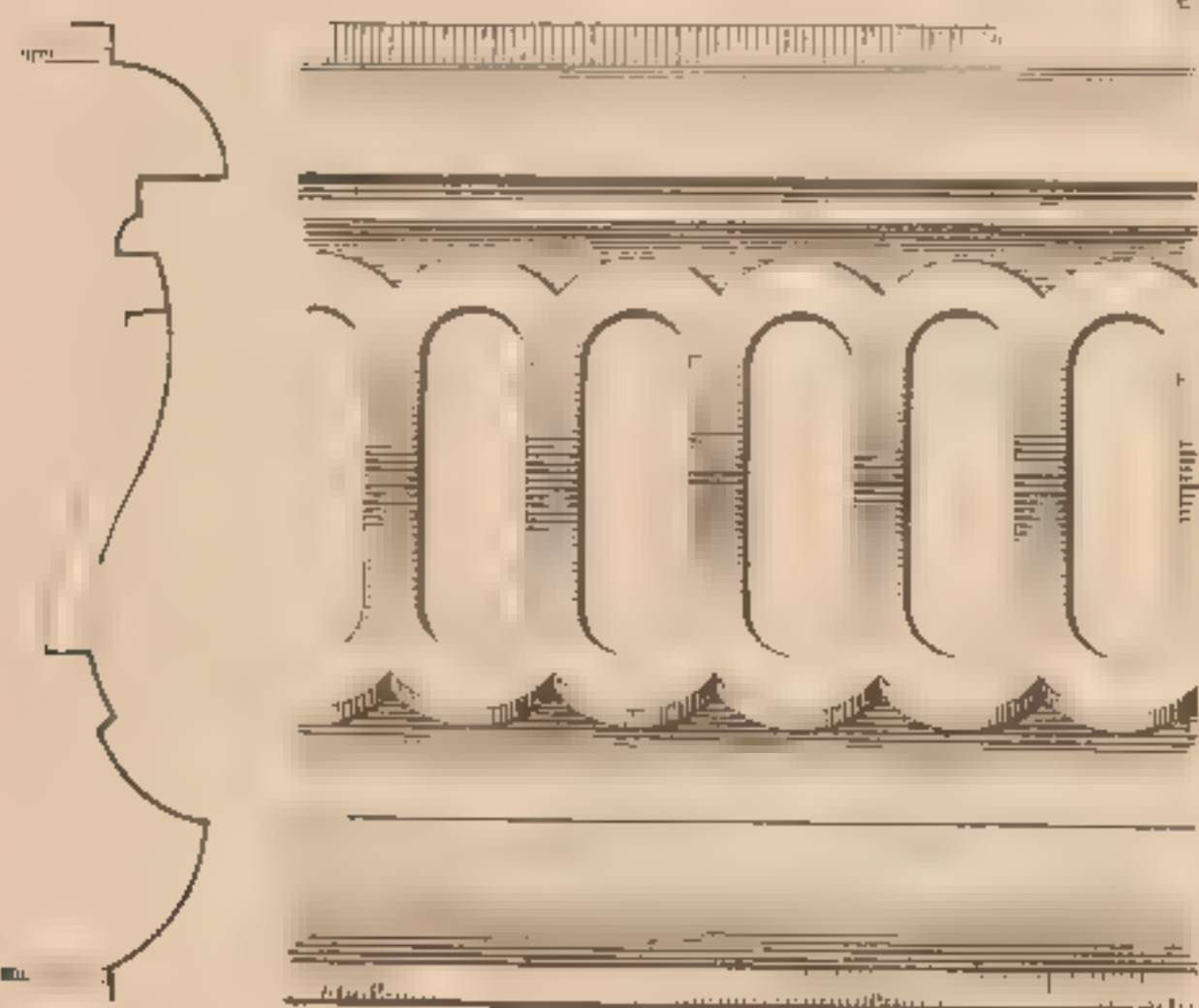
Nº 48



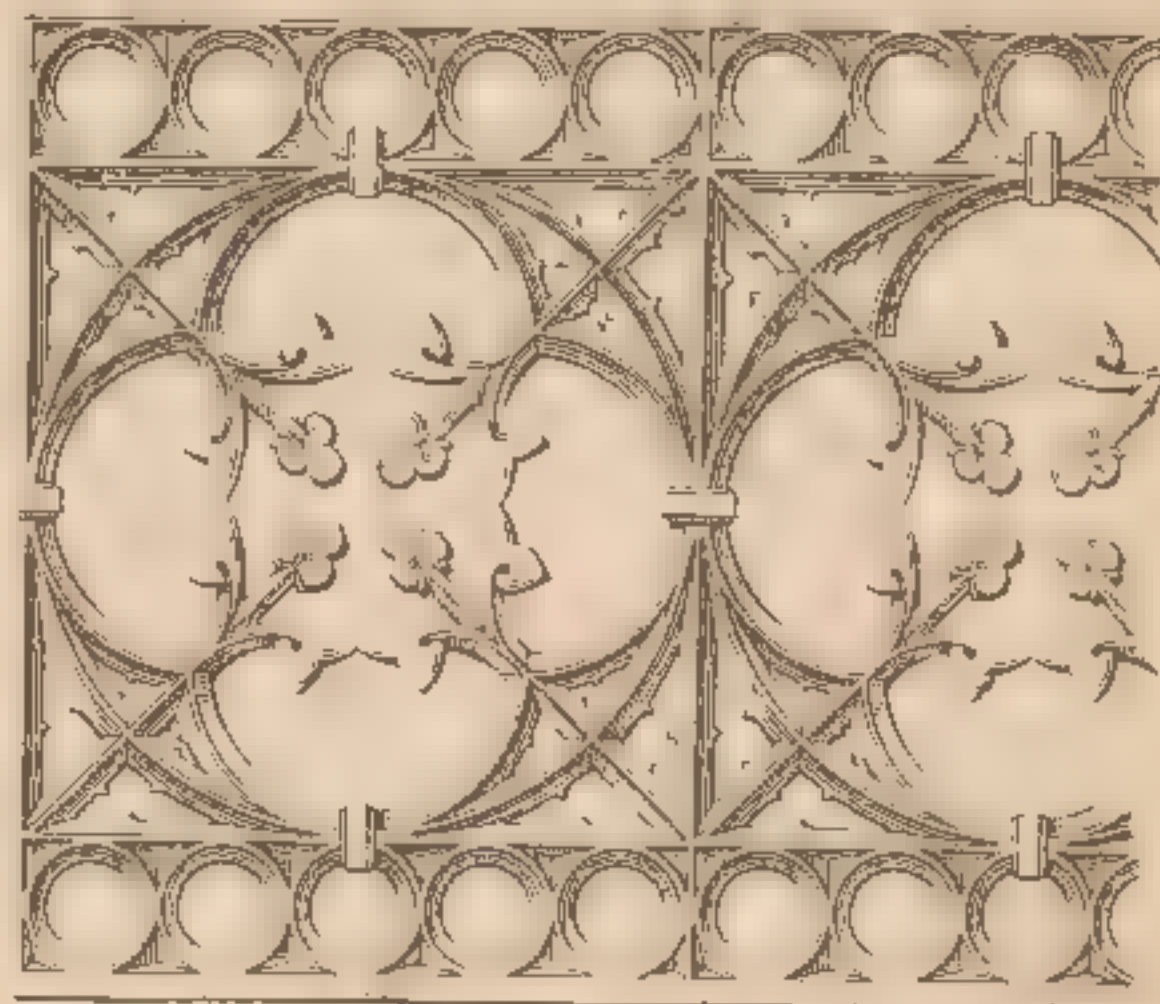
Nº 49



Nº 195



Nº 20



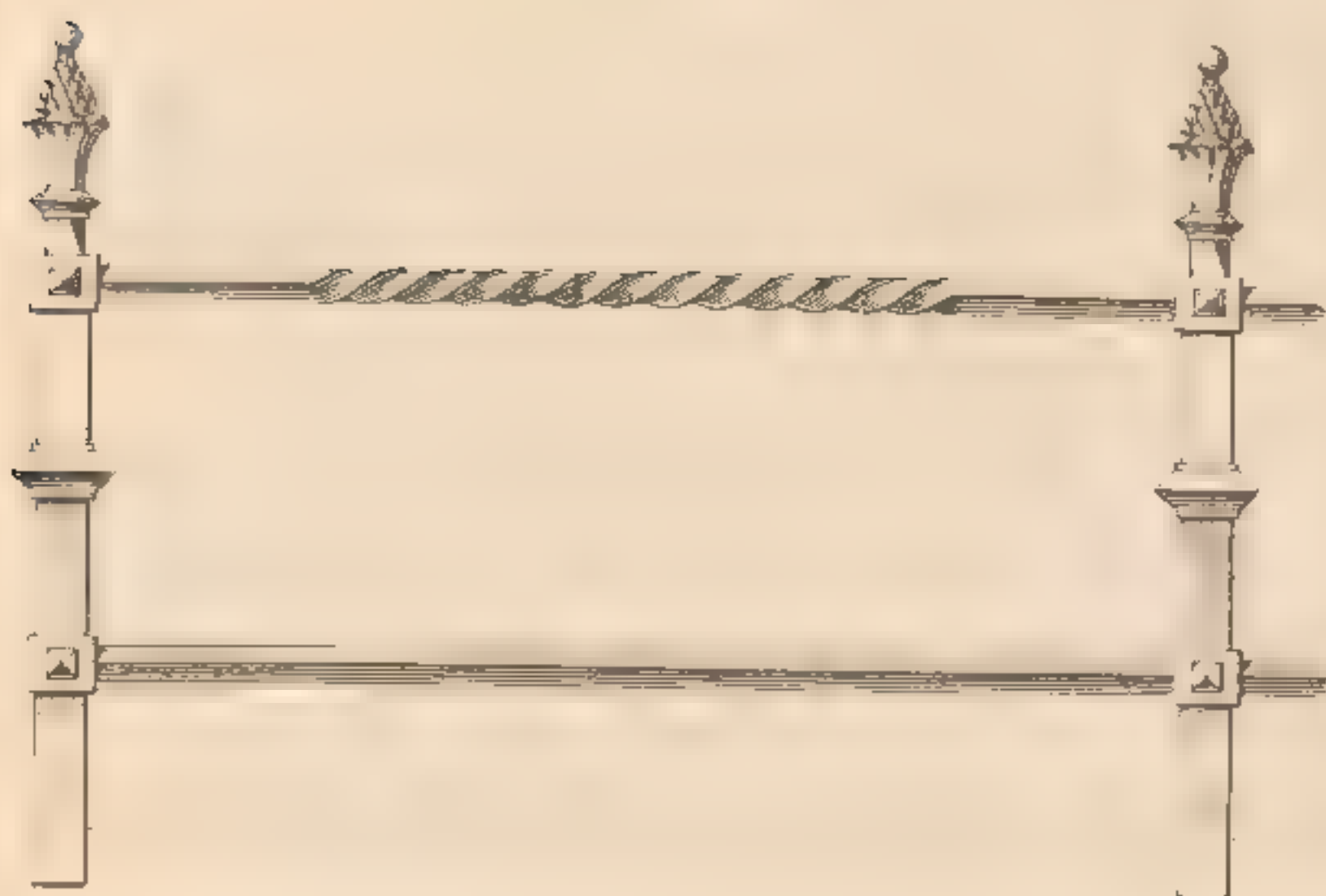
Nº 20



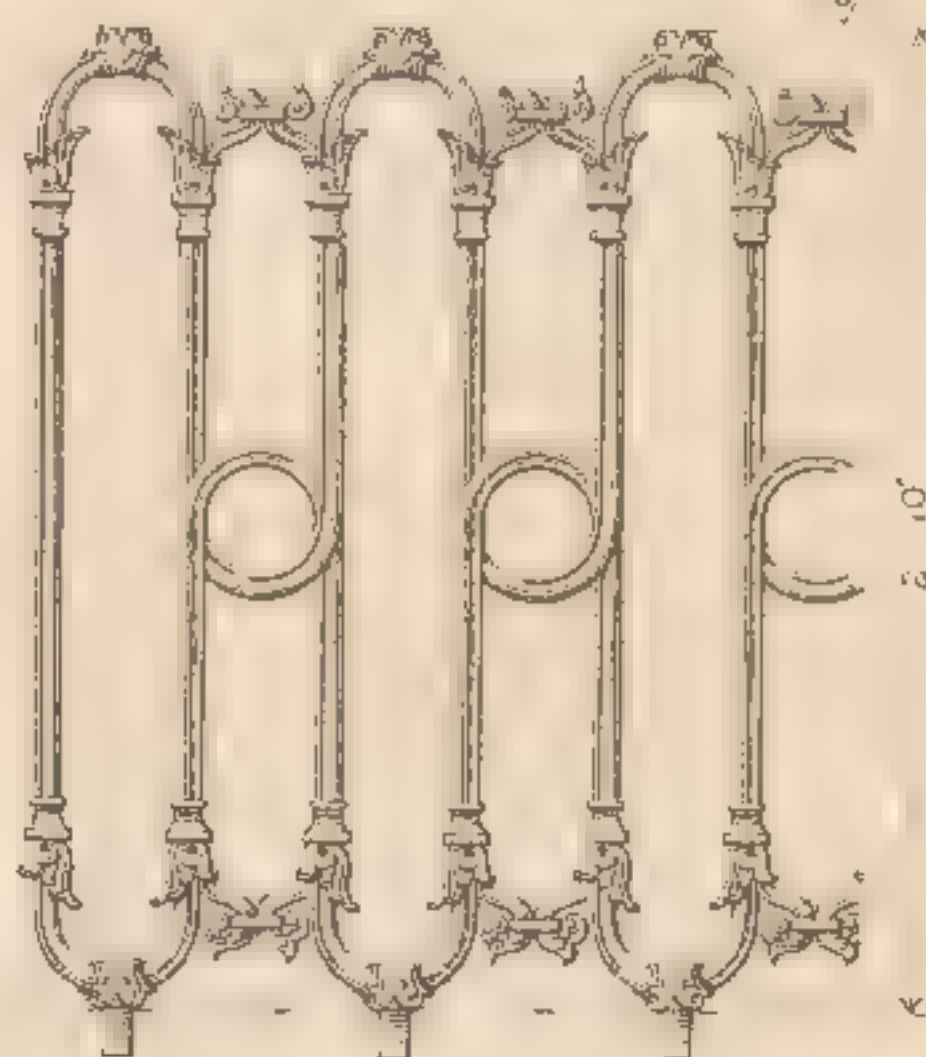
SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING & CO

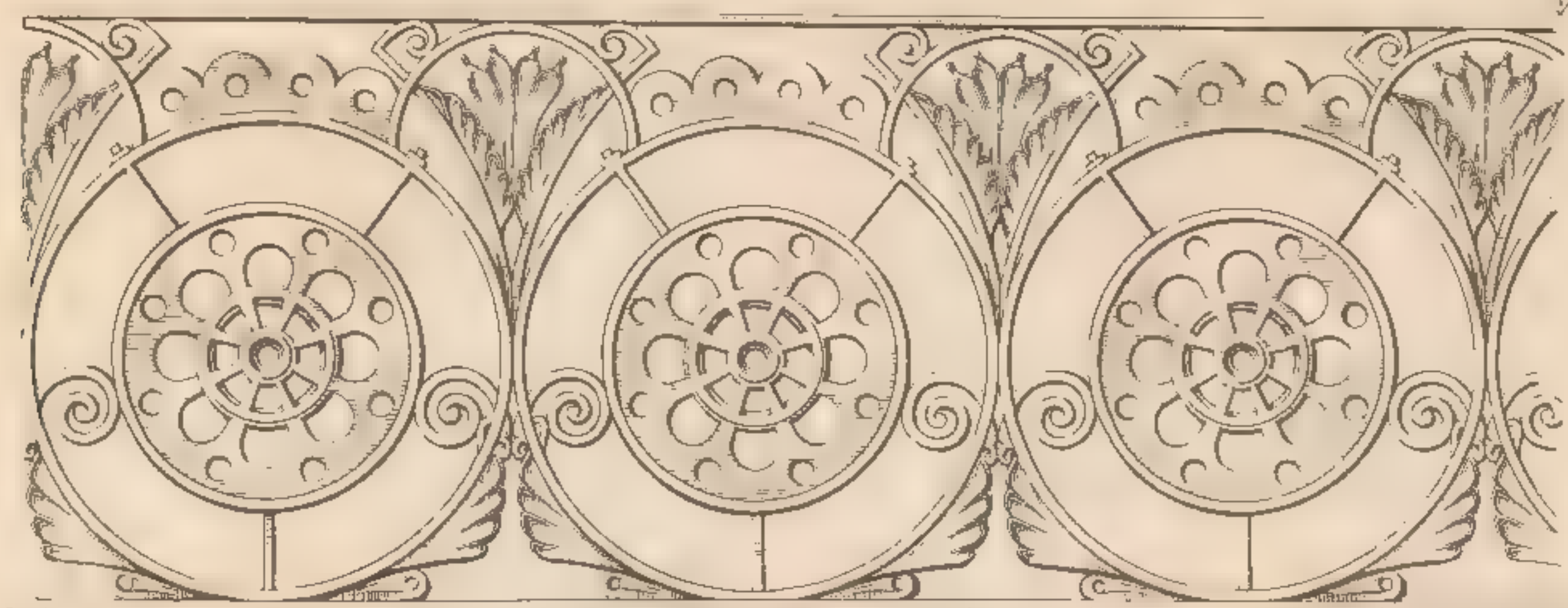
Nº 20



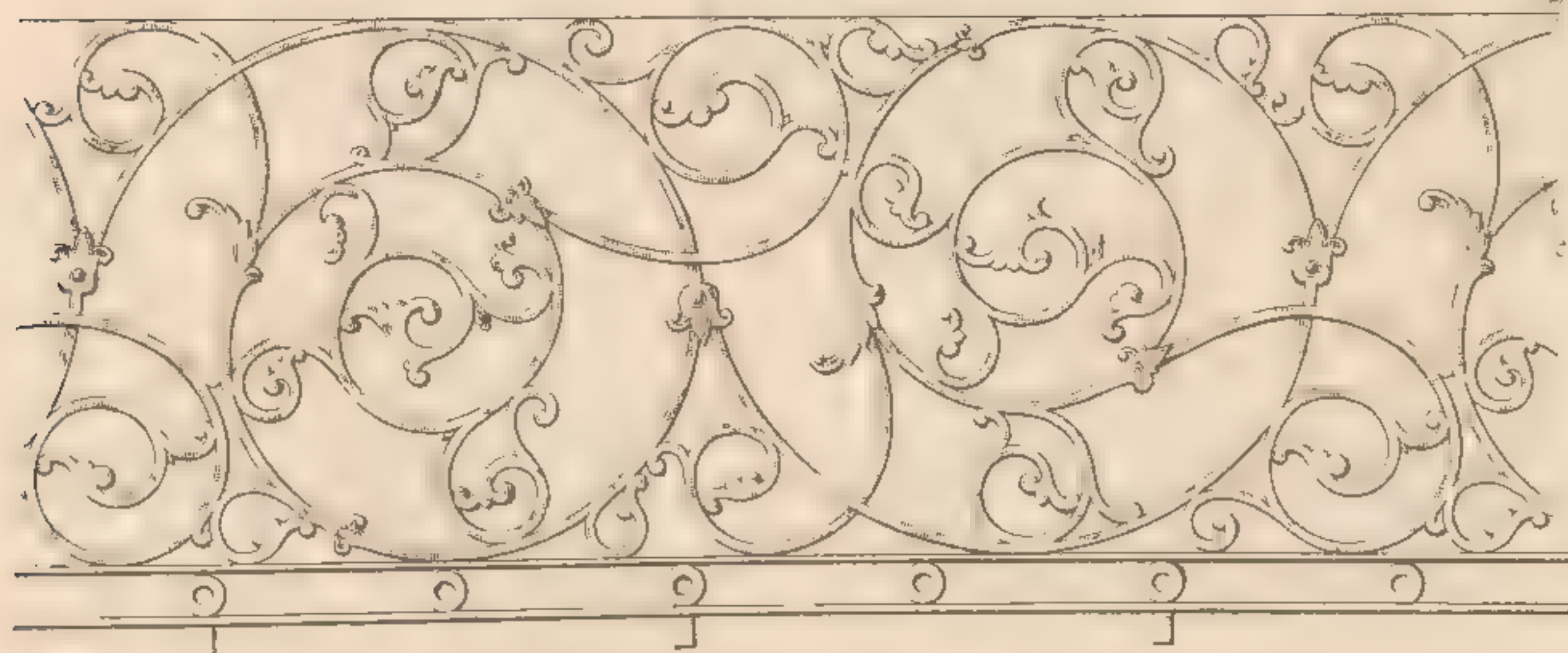
Nº 466



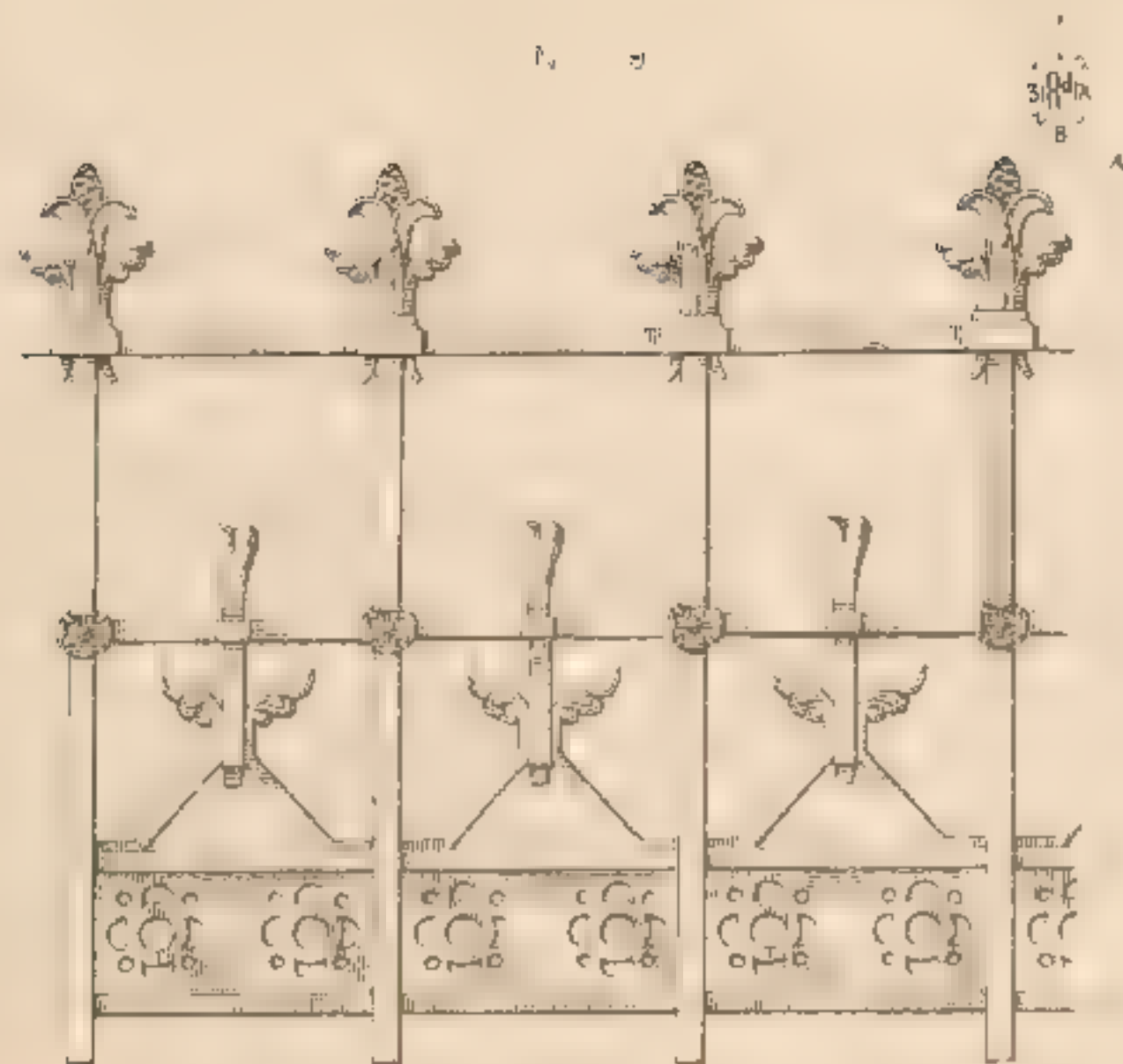
Nº 4



Nº 25



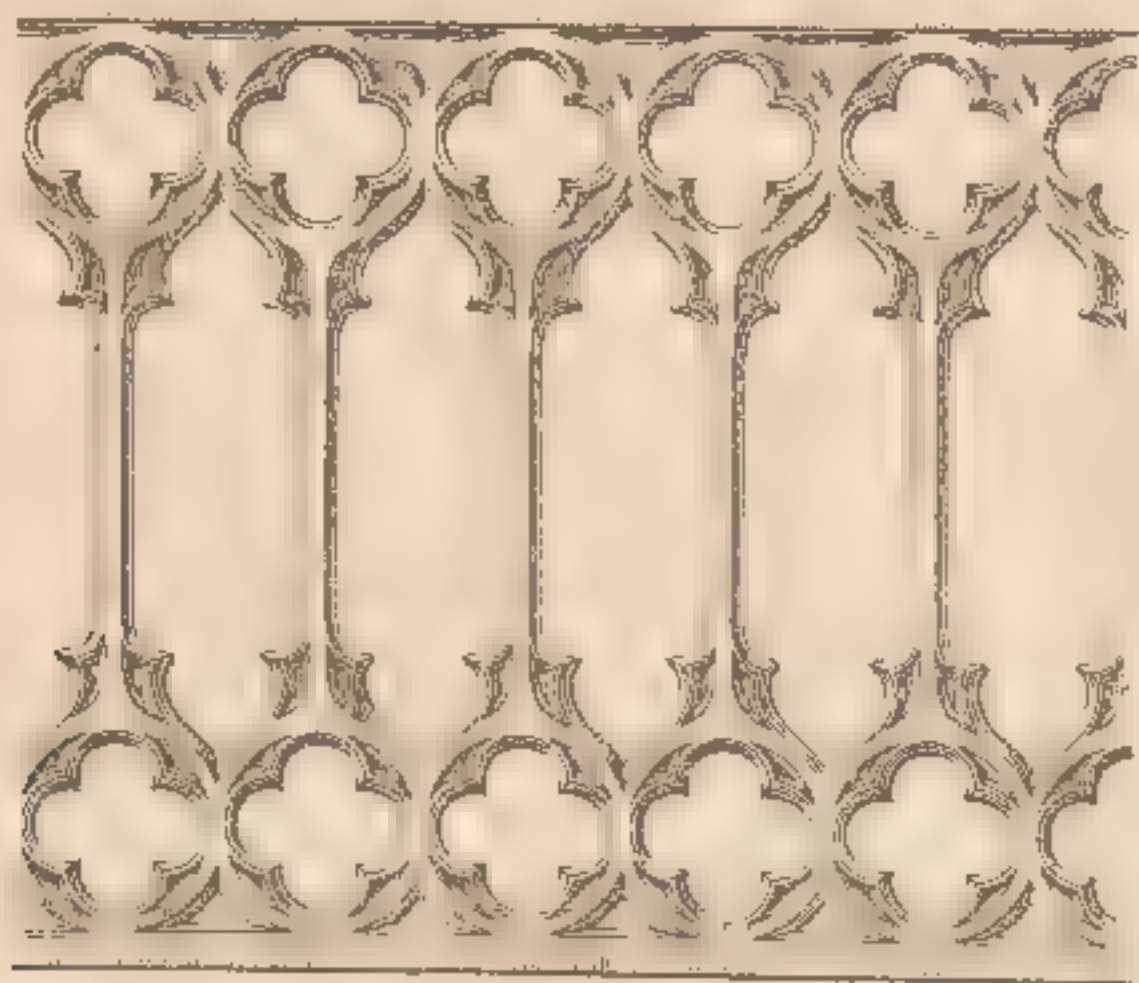
SCALE INCH = FOOT



N° 457



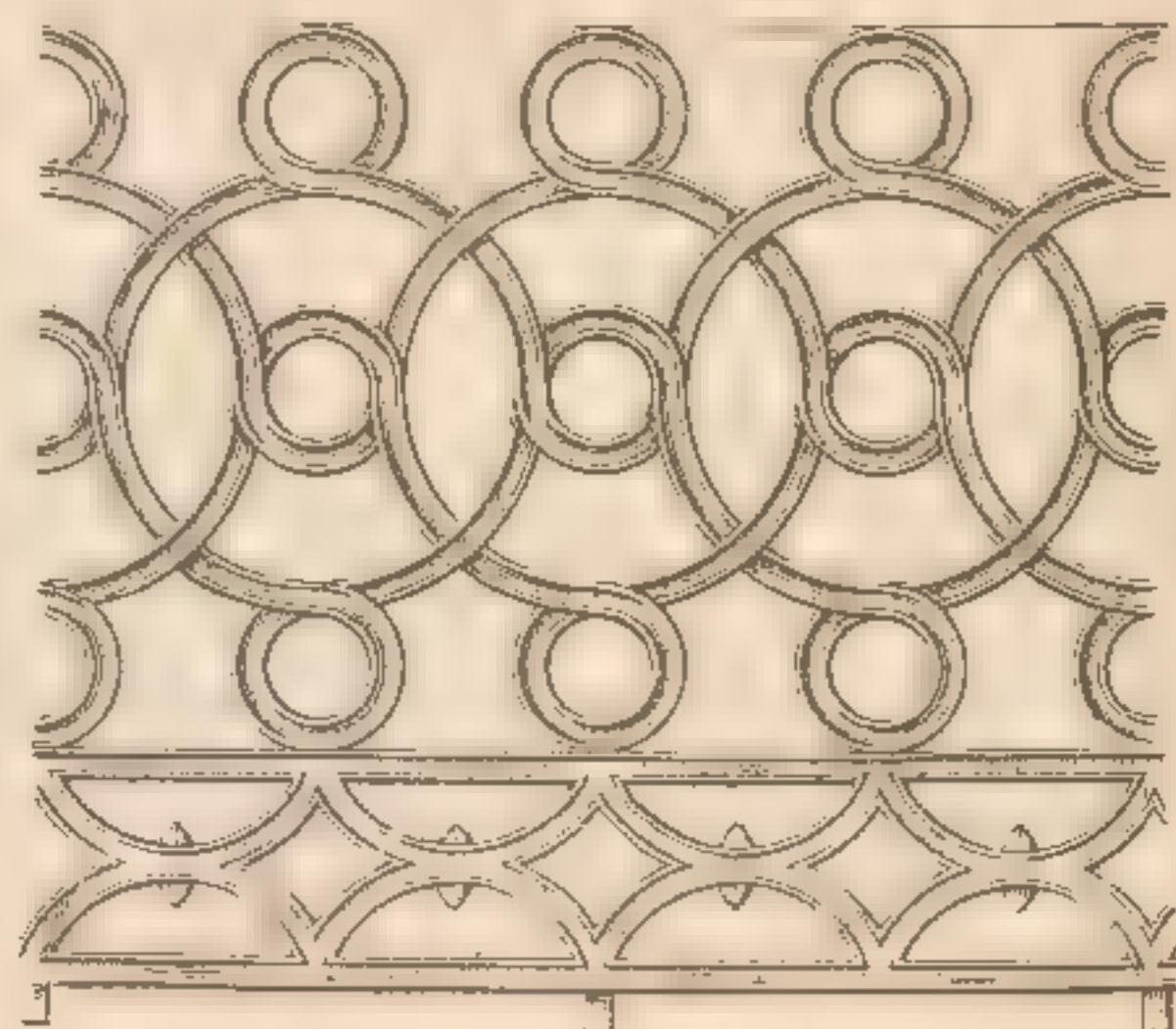
N° 4



N° 352



N° 352



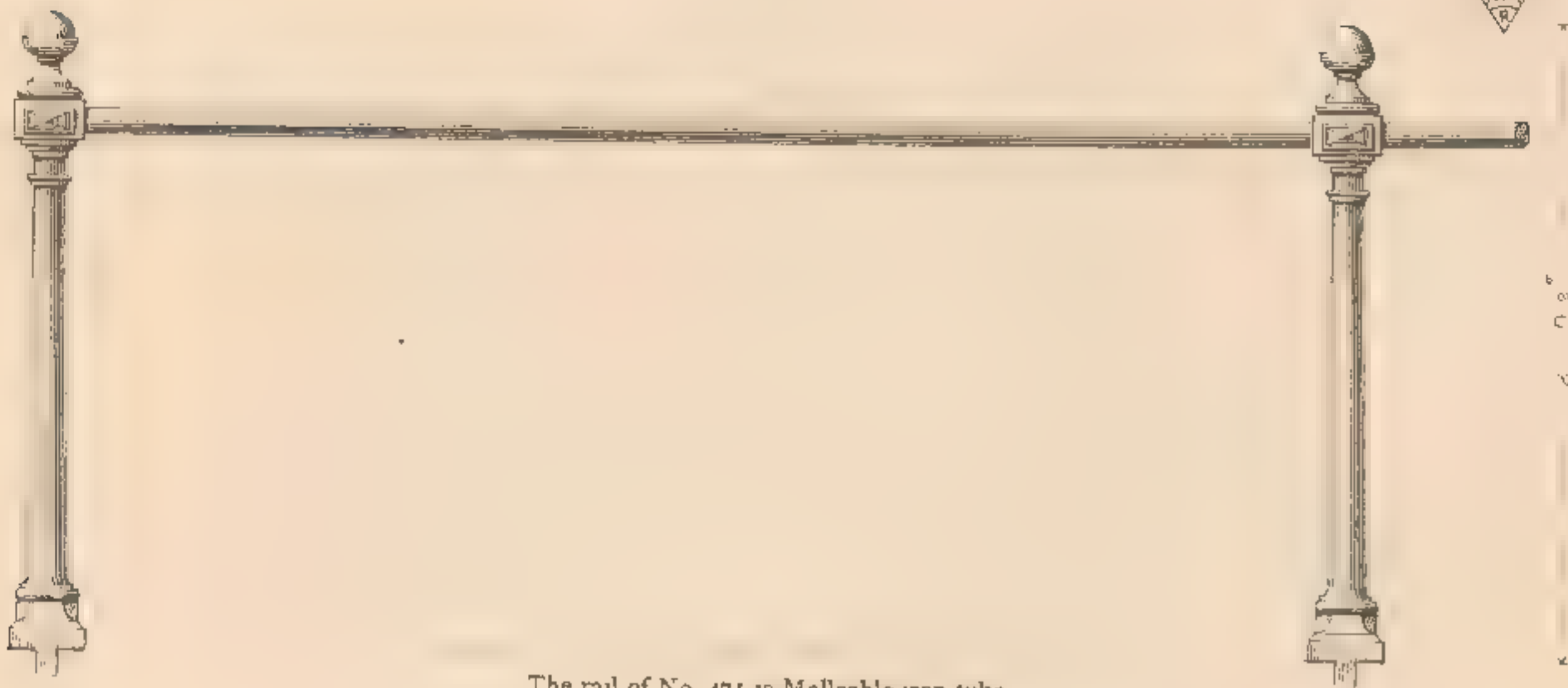
N° 393



N° 393

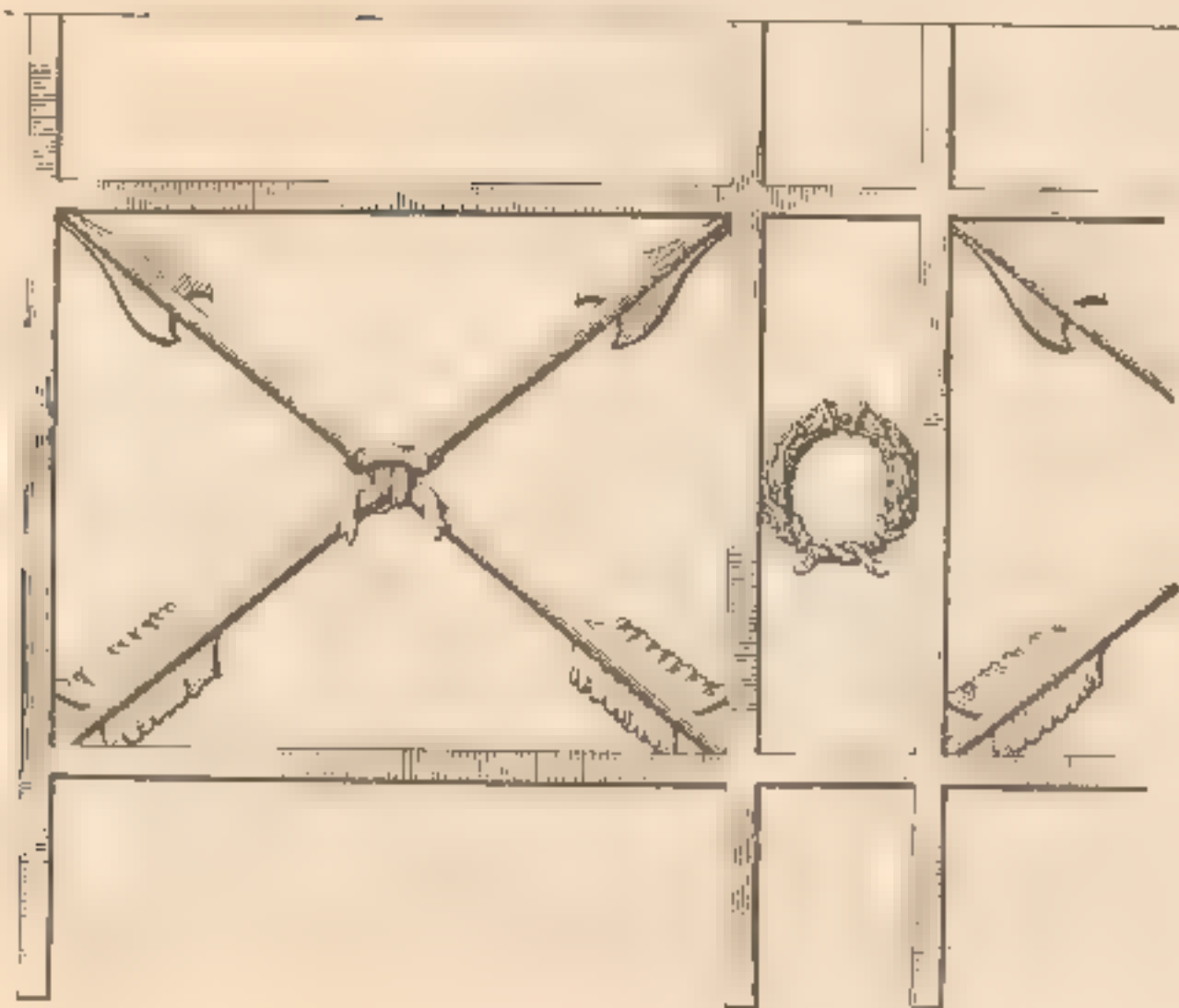
MACFARLANE'S RAILING & CO

Nº 471

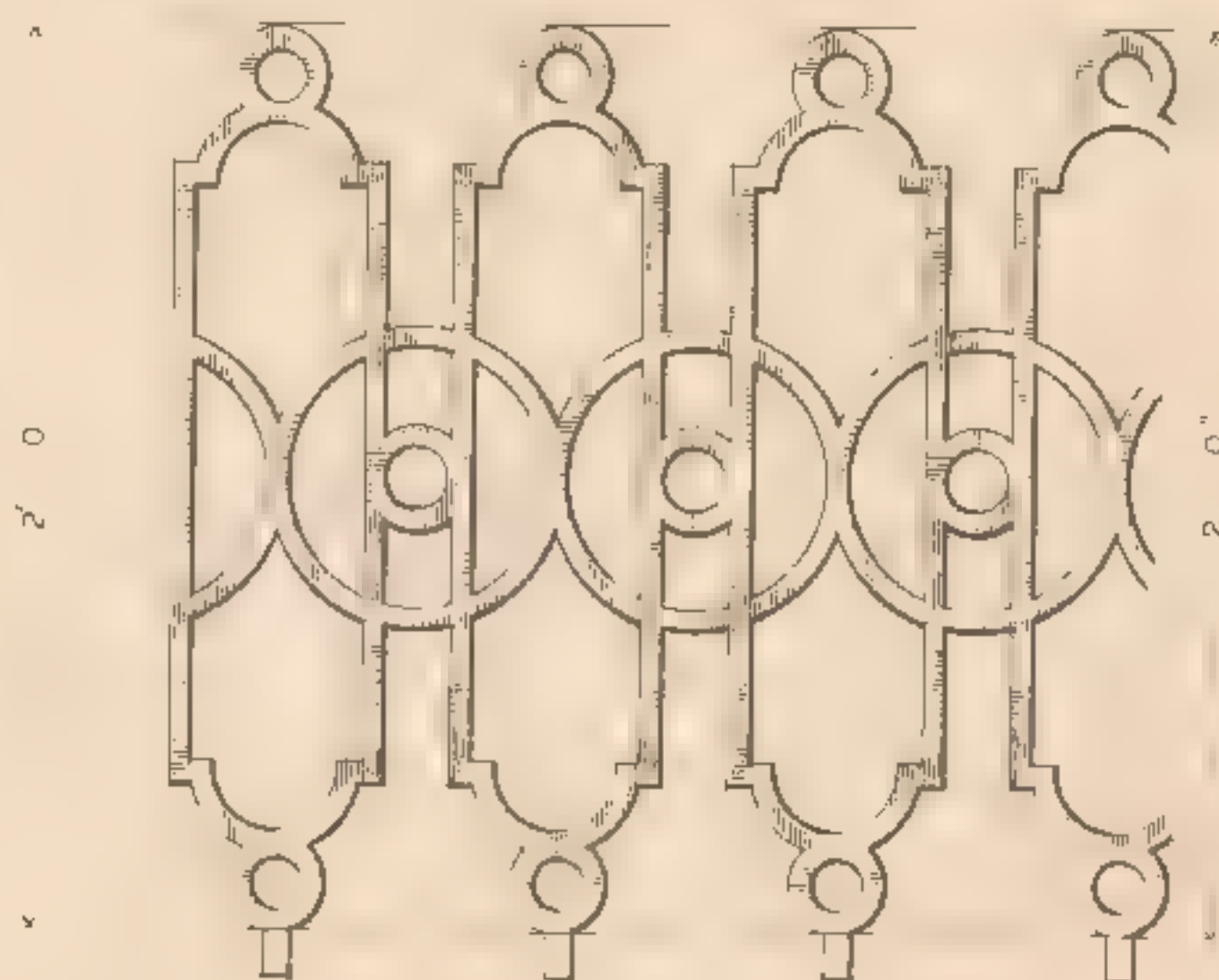


The rail of No. 471 is Malleable iron tube.

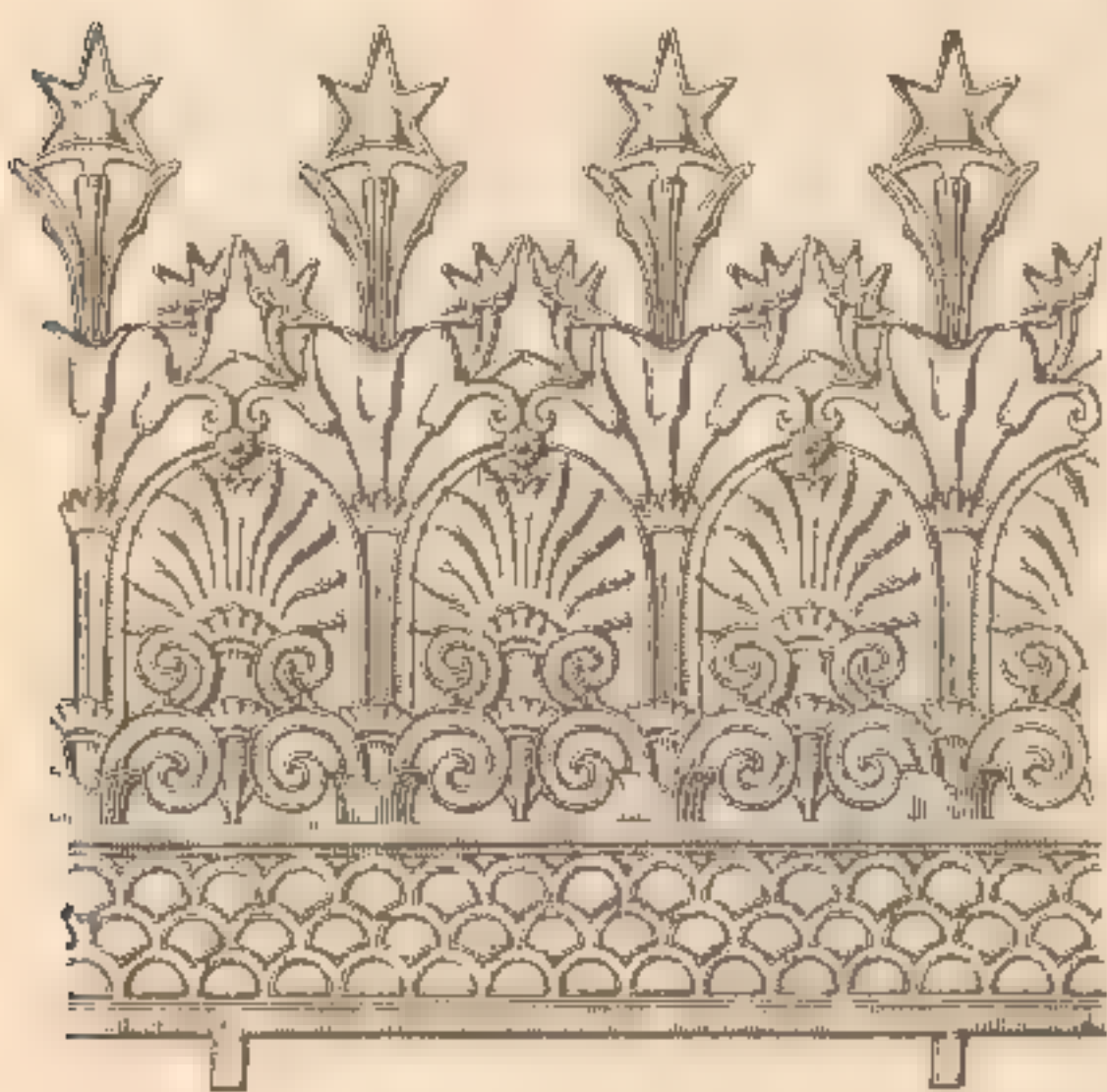
Nº 407



Nº 302



Nº 57



Nº 245



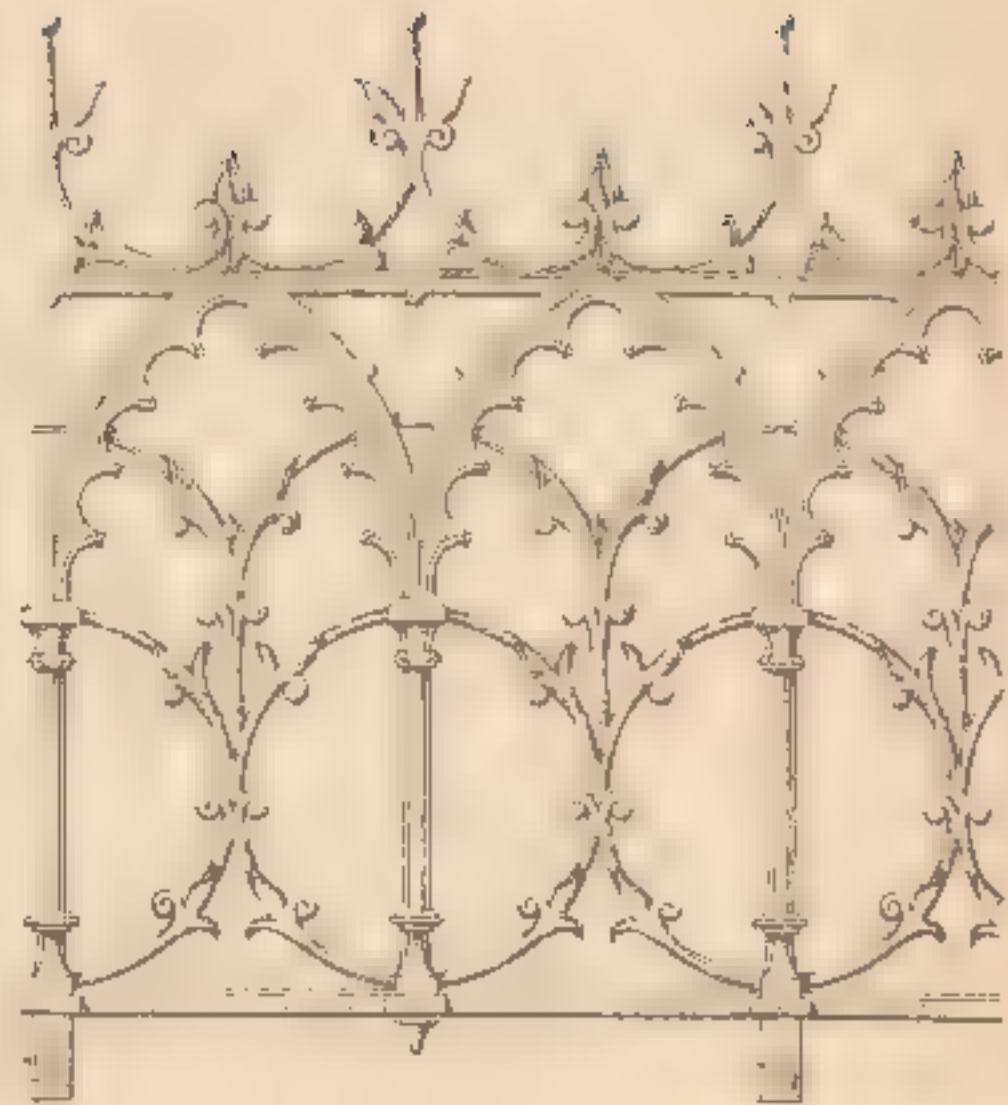
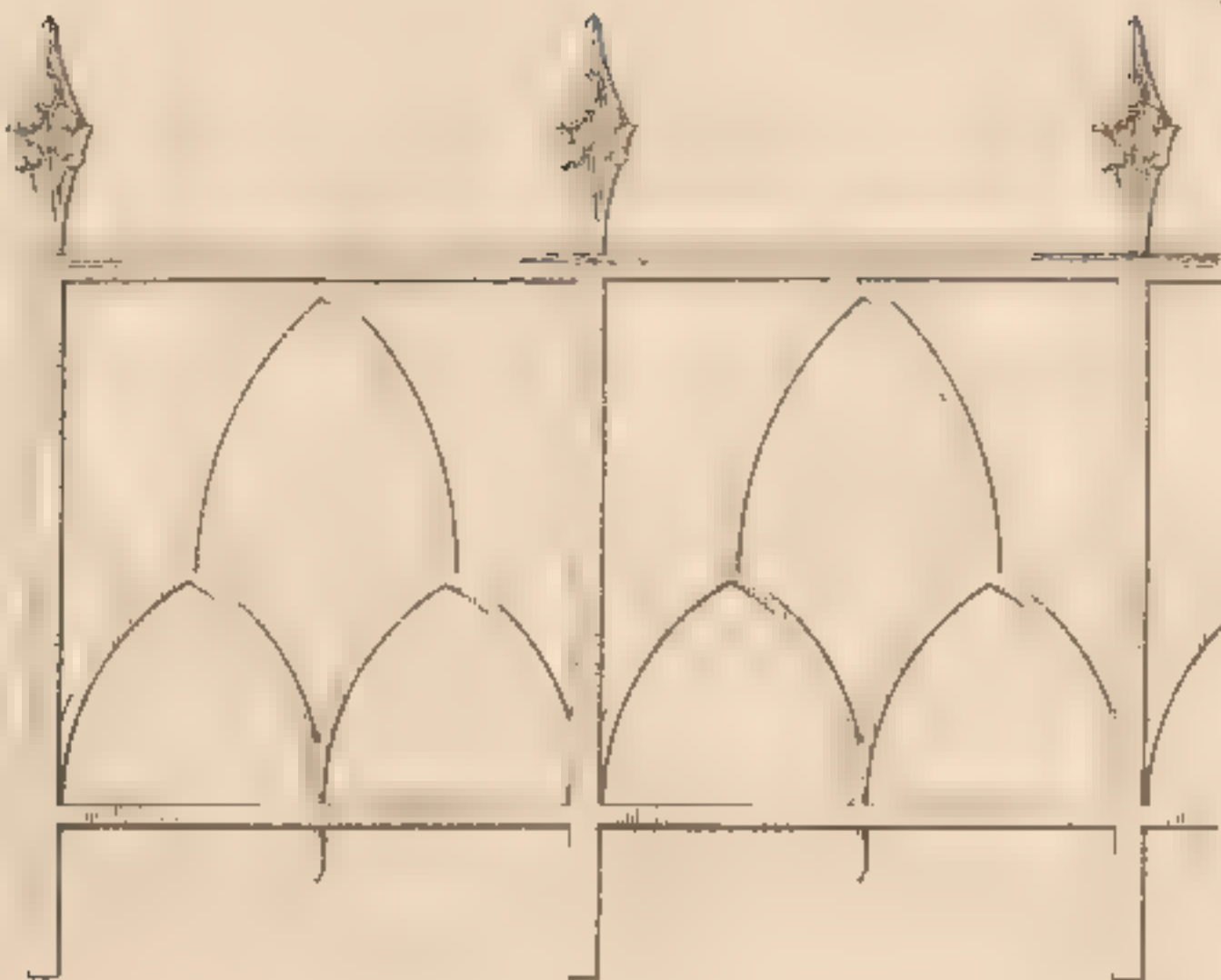
A E NCH = FOOT

A A F A H V E F H N 3

N 1

2
40
H

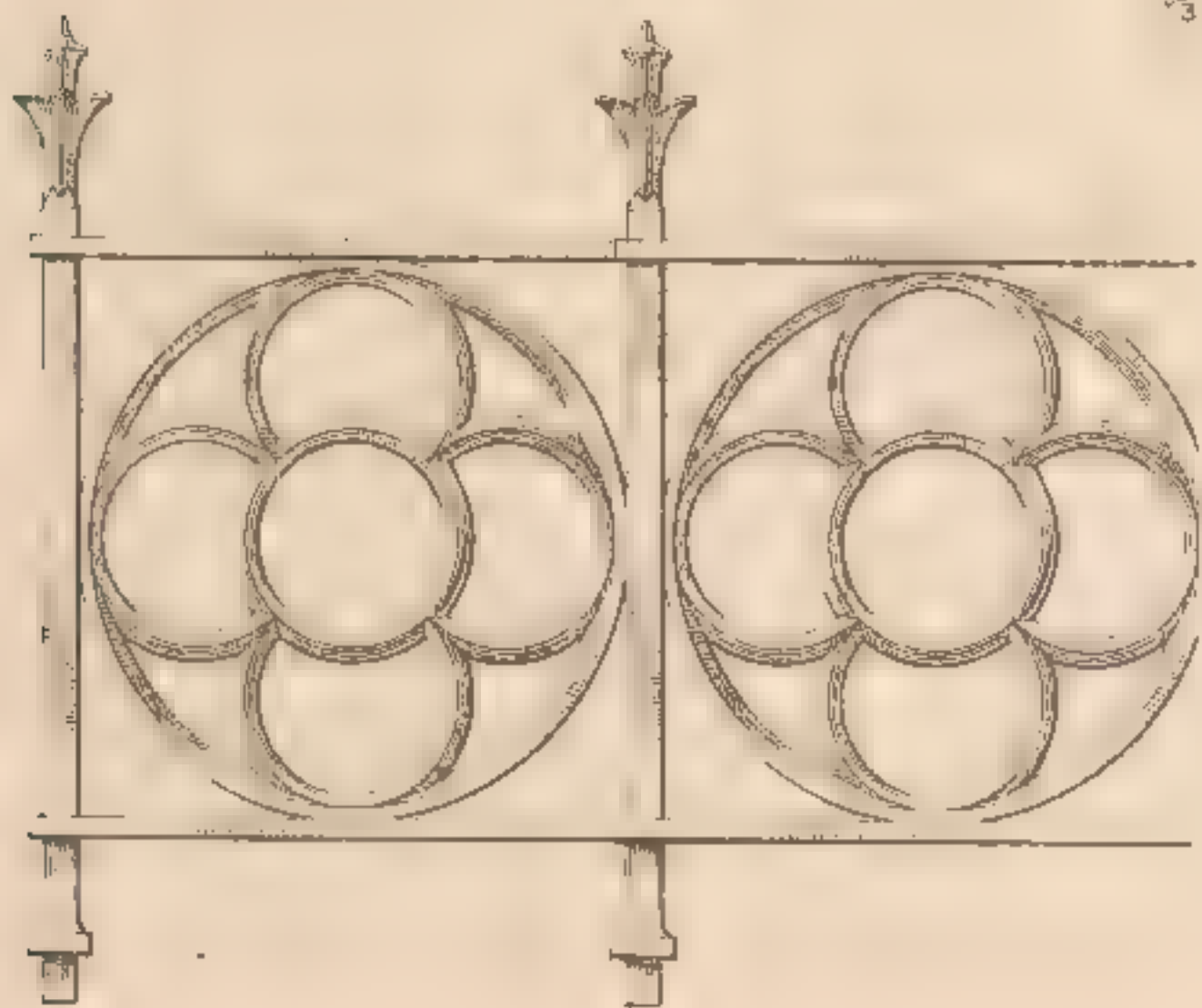
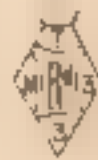
N 52



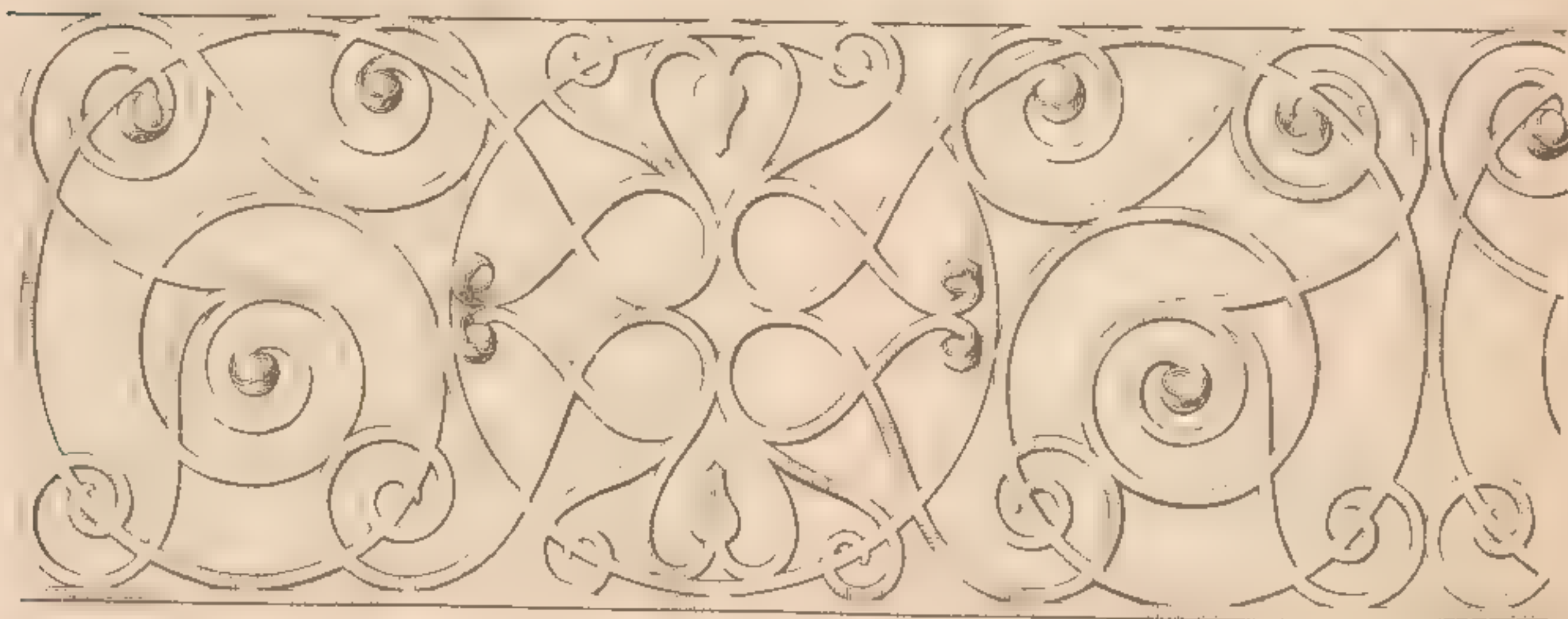
N 19

7
A B 7
3

N 131



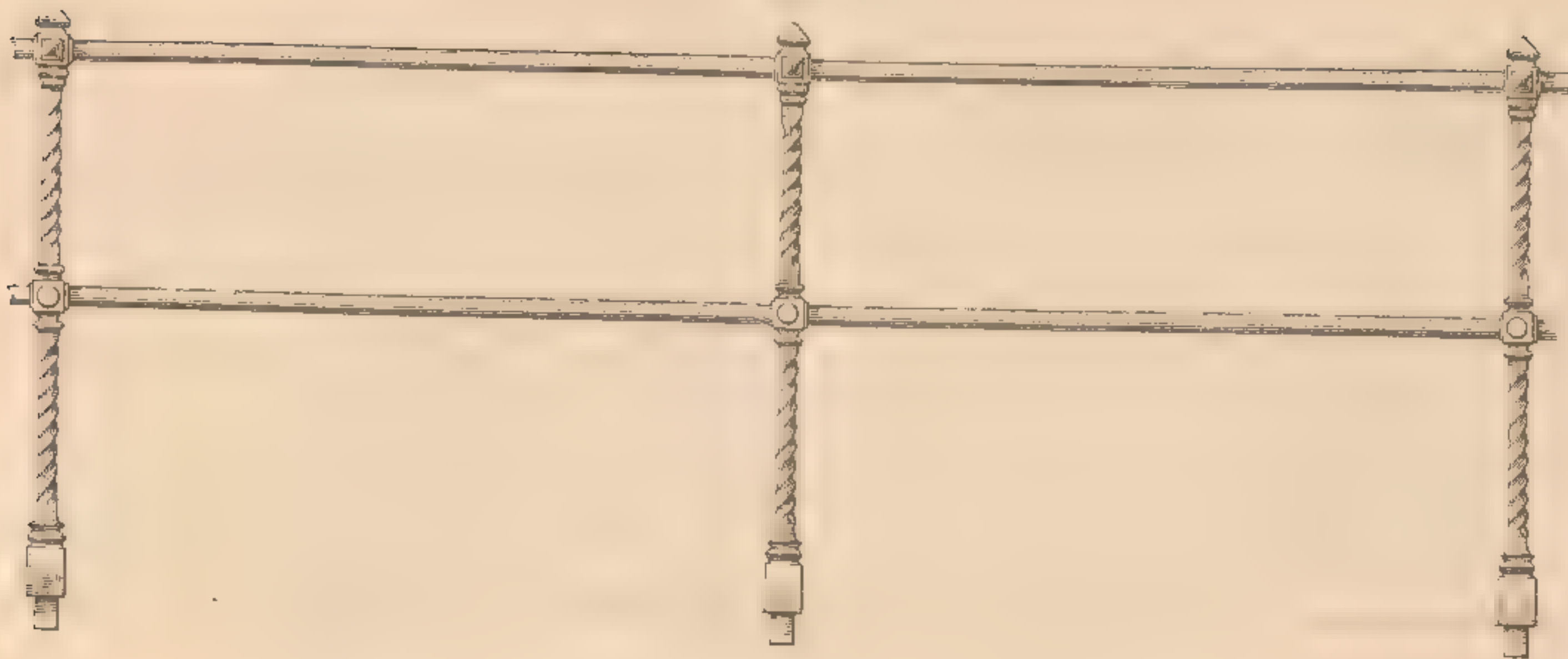
N 2



4 C

MACFARLANE'S RAILING & CO

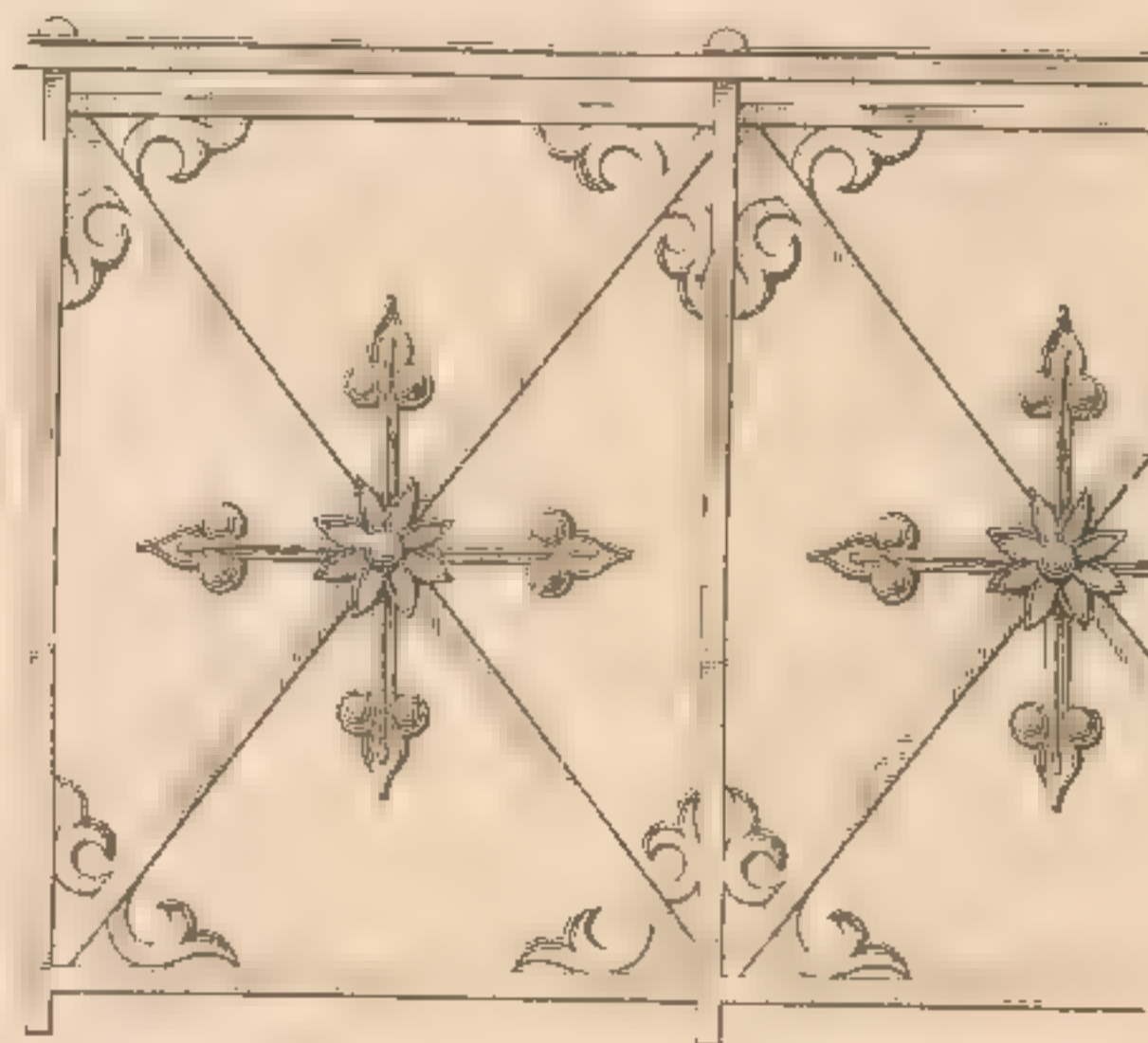
Nº 434



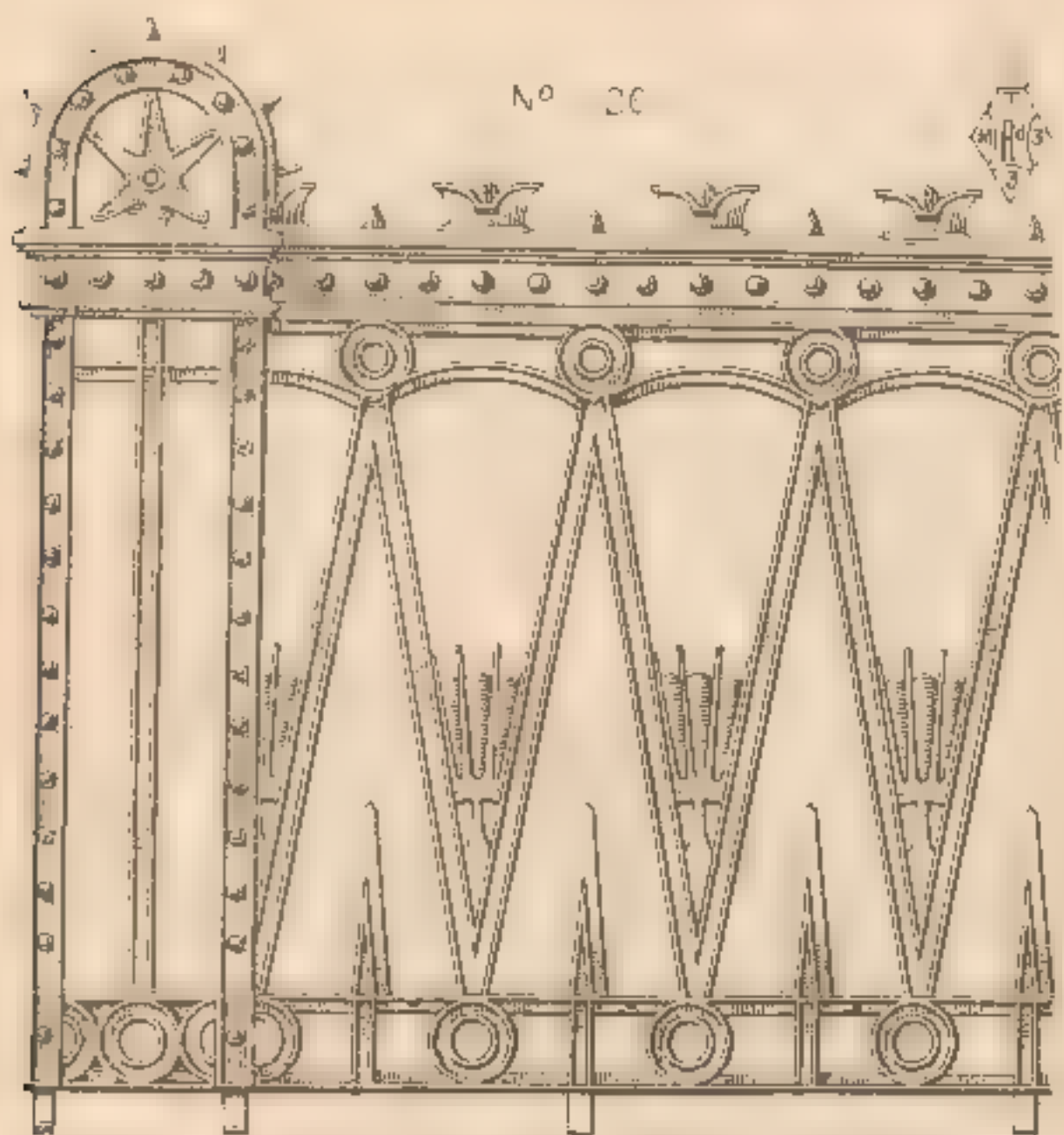
Nº 45



Nº 209

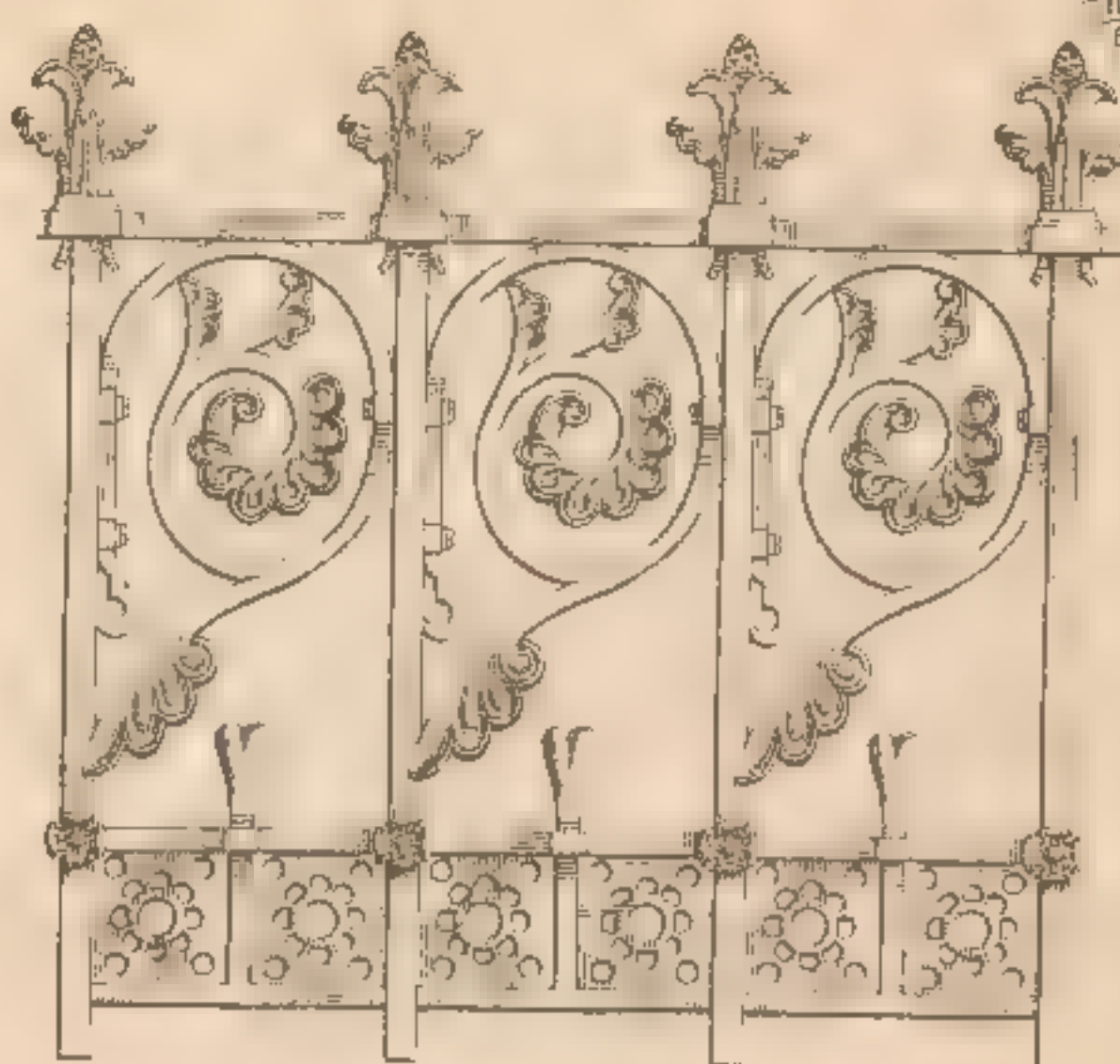


Nº 20



Standards charged extra.

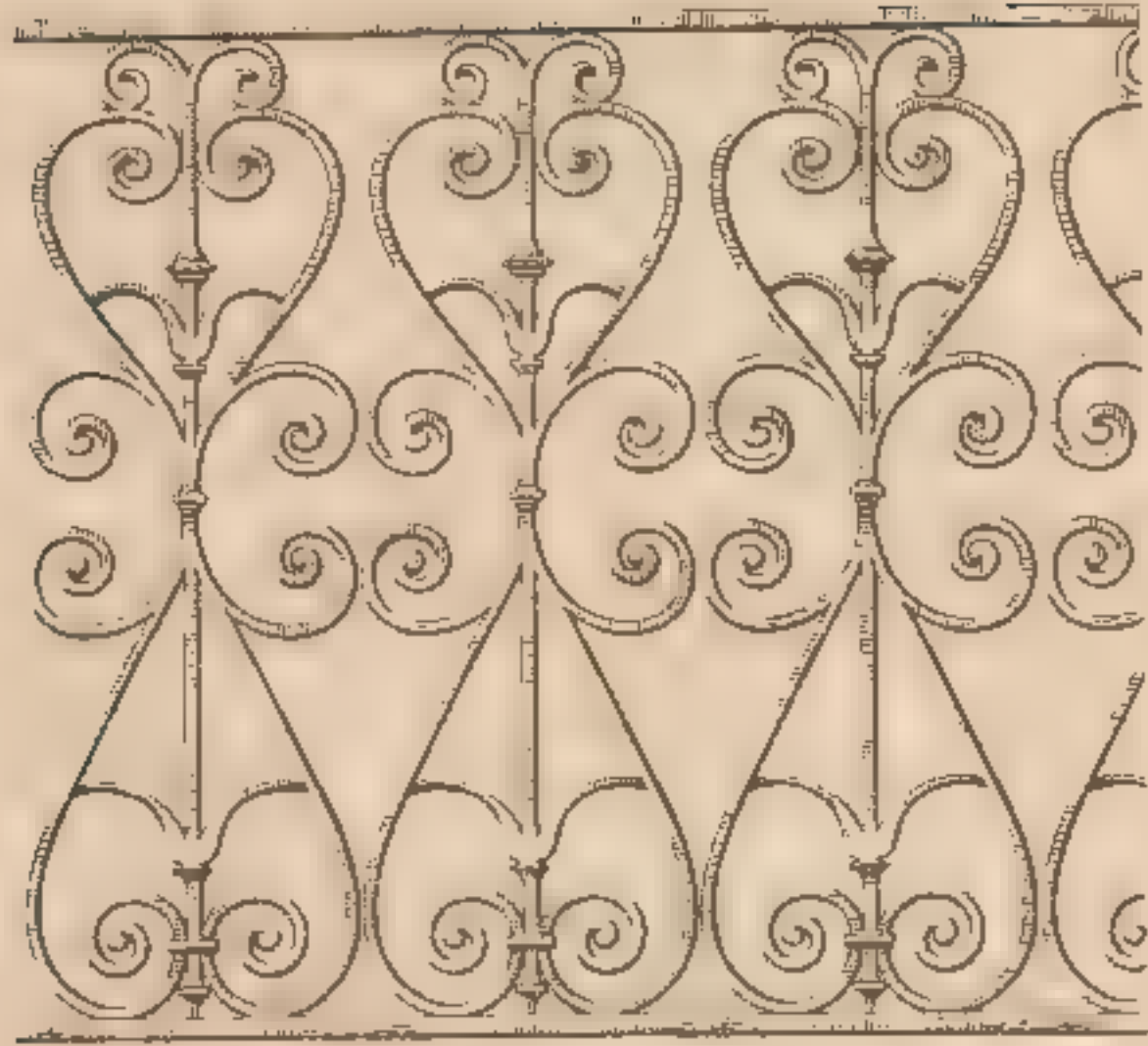
Nº 2



SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING & CO

Nº 23



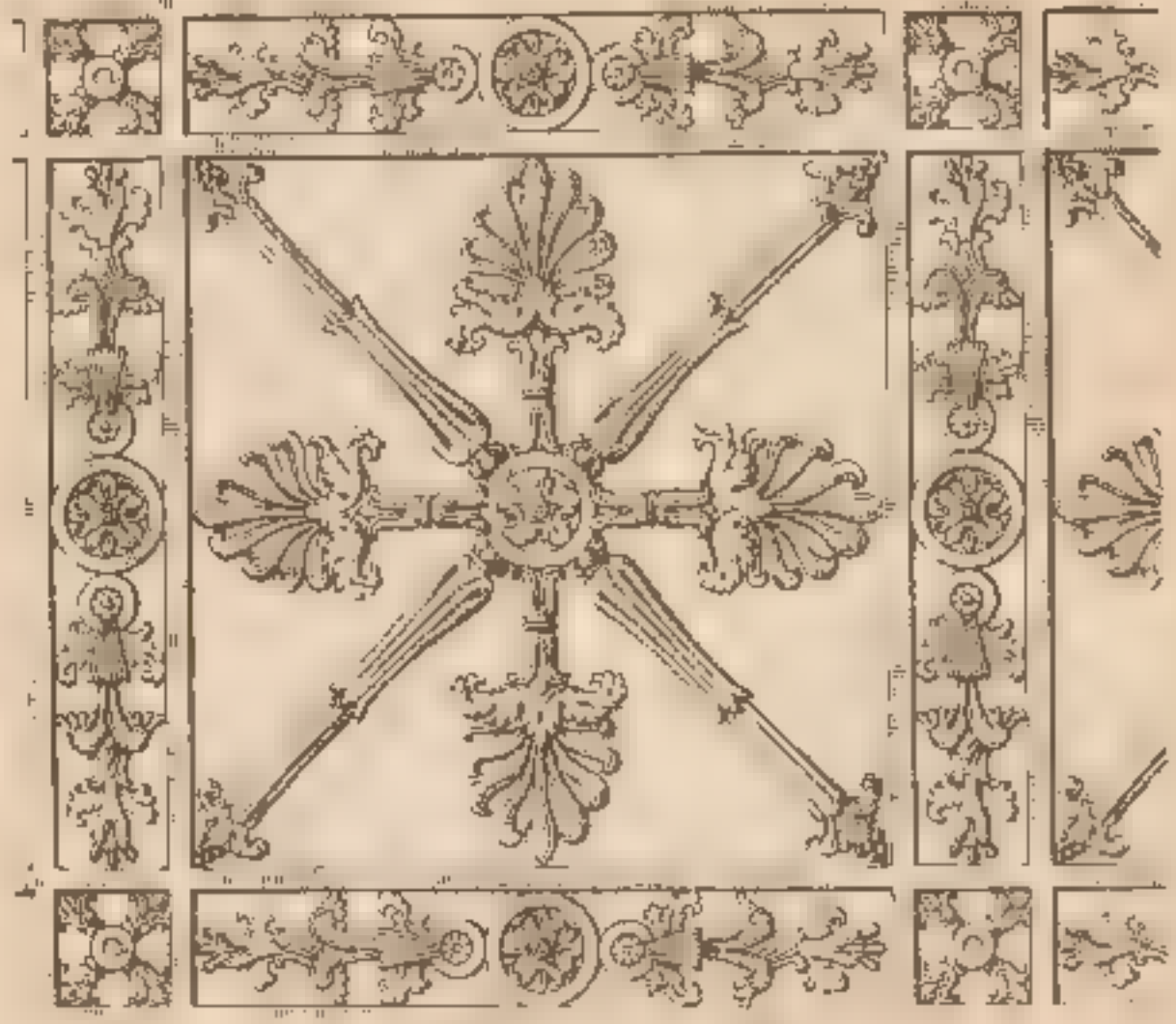
Nº 4



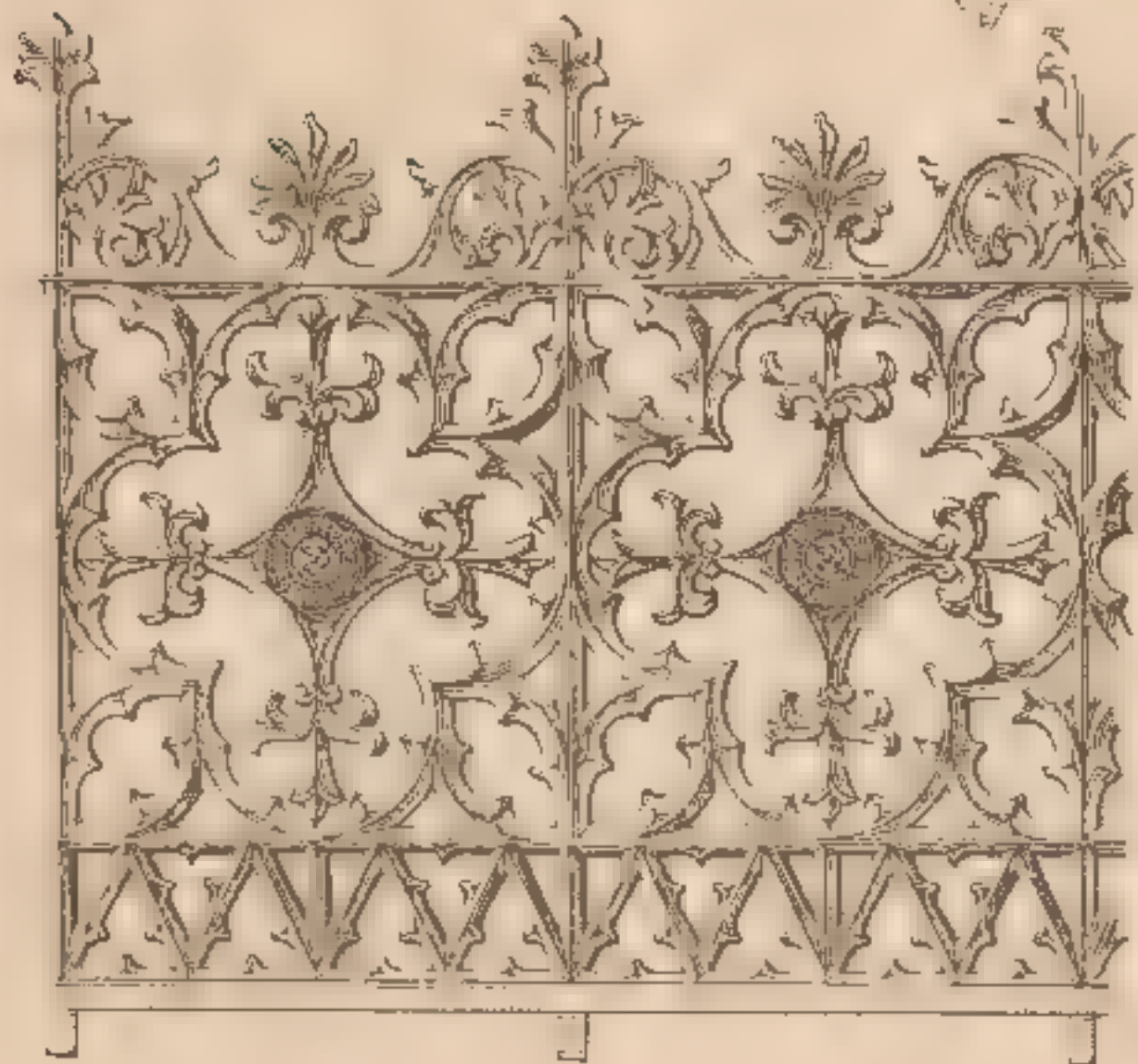
Nº 27



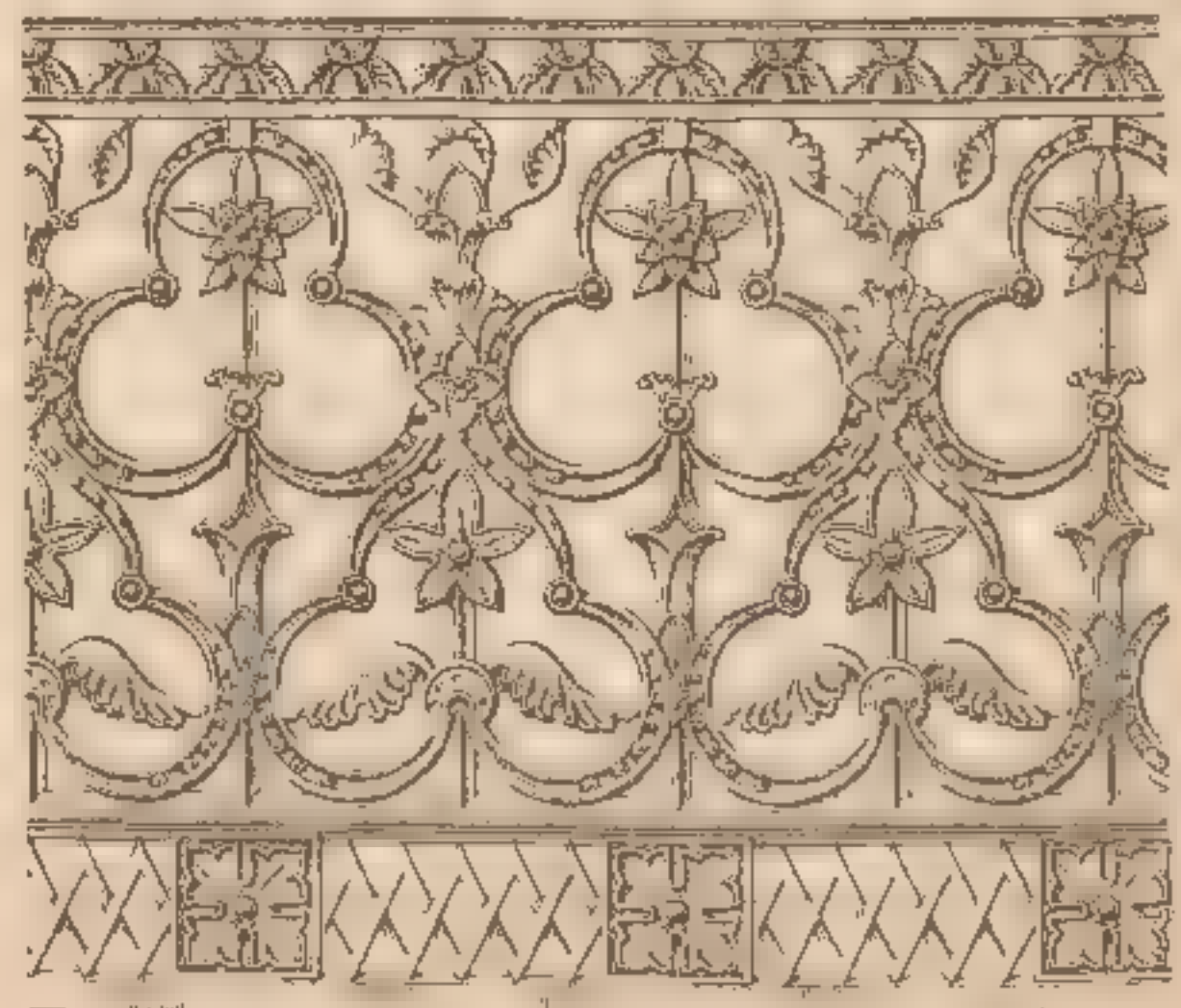
Nº 24



Nº 76

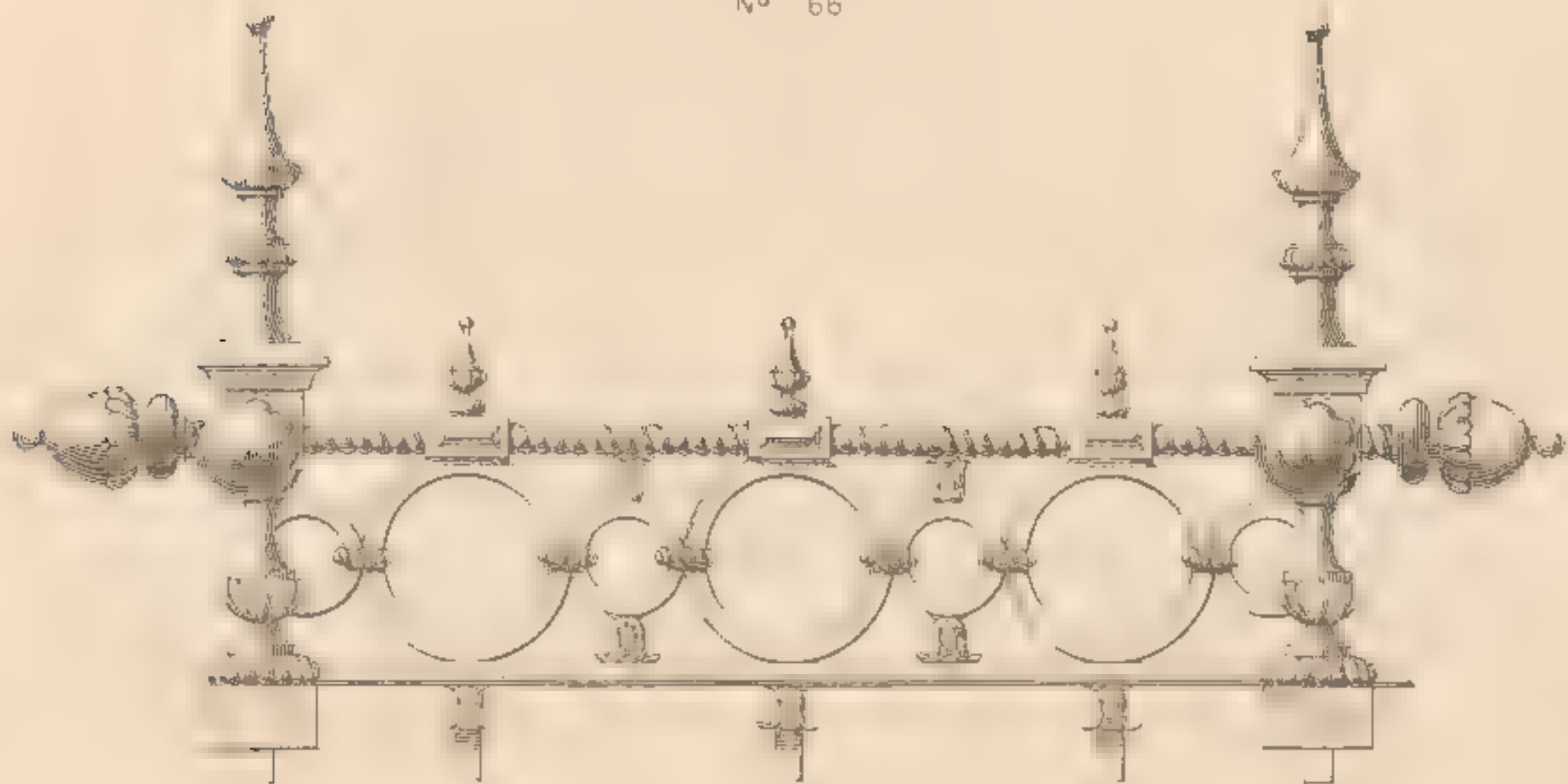


Nº 17



MACFARLANE'S RAILING & CO

Nº 66



5' 0" between centres

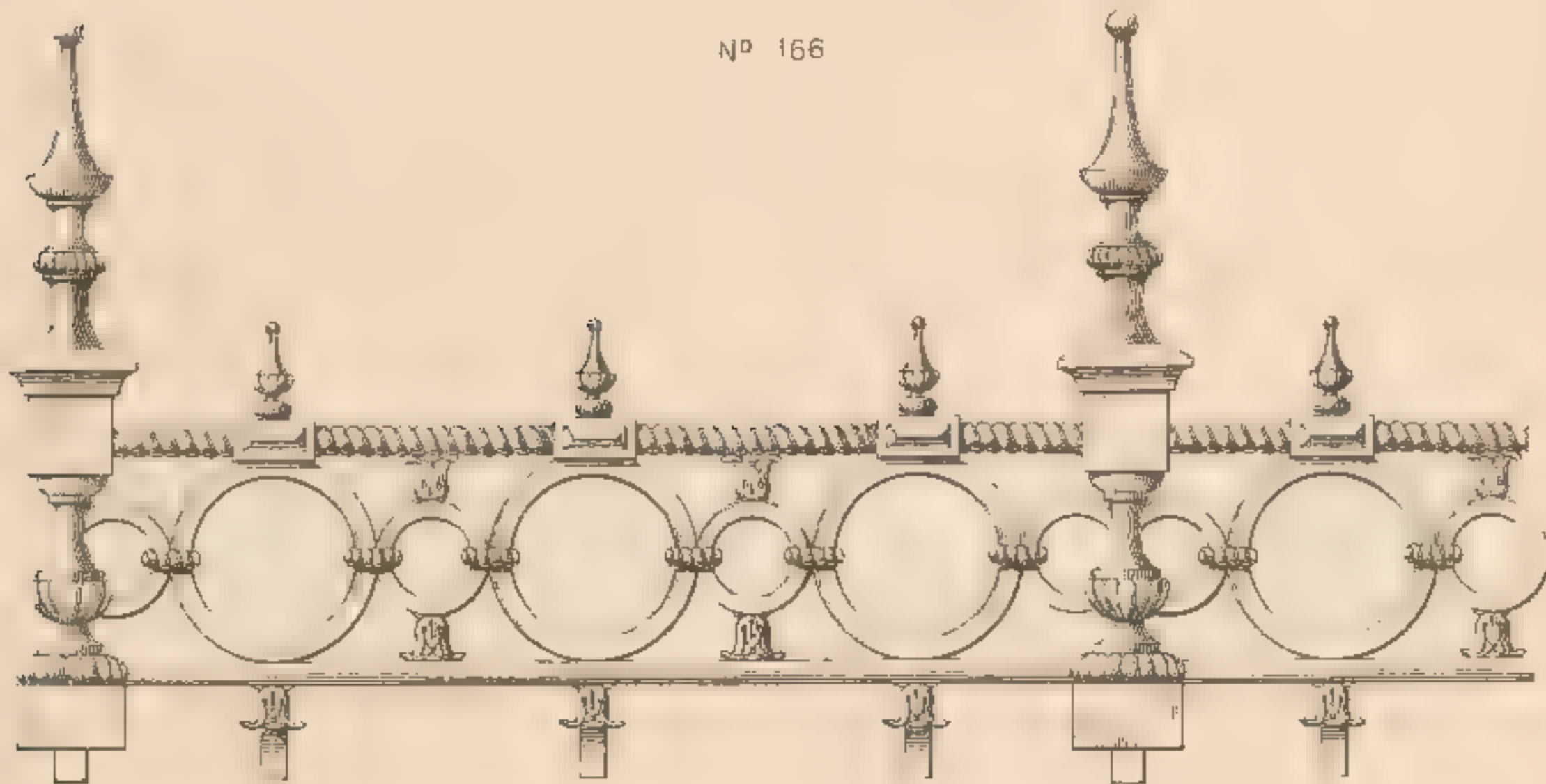


Nº 20 6' 5" between centres.

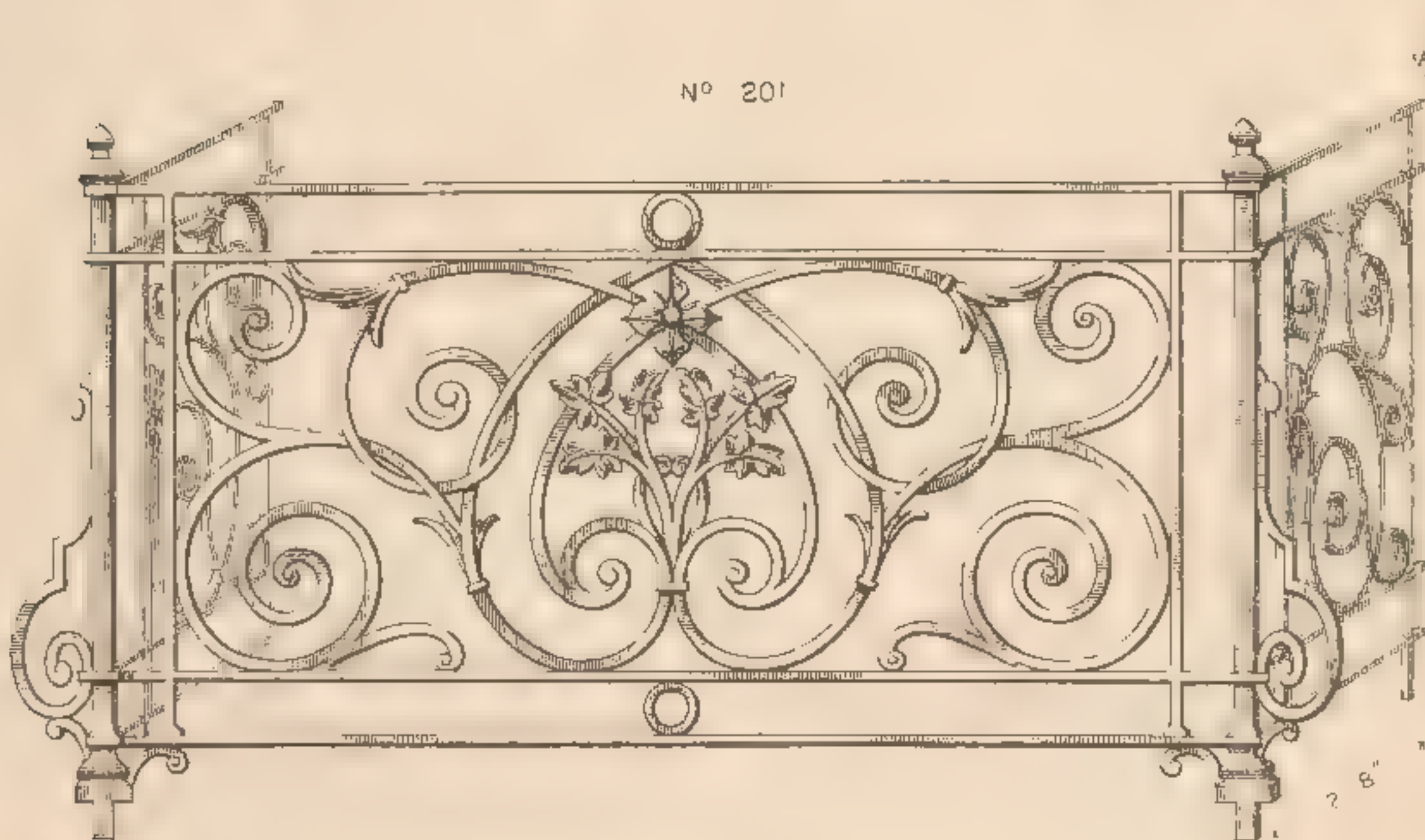


MACFARLANE'S RAILING & CO

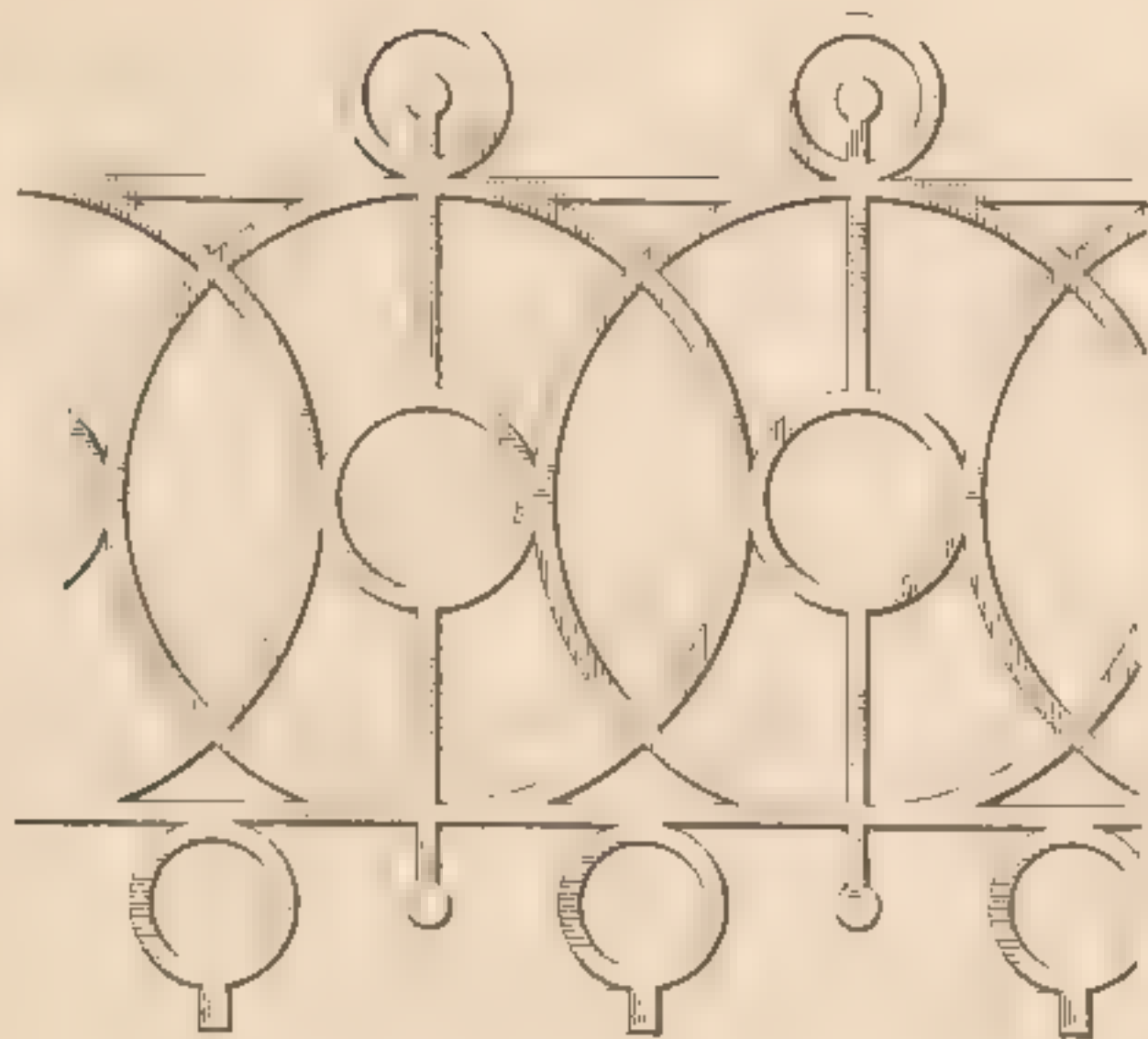
Nº 166



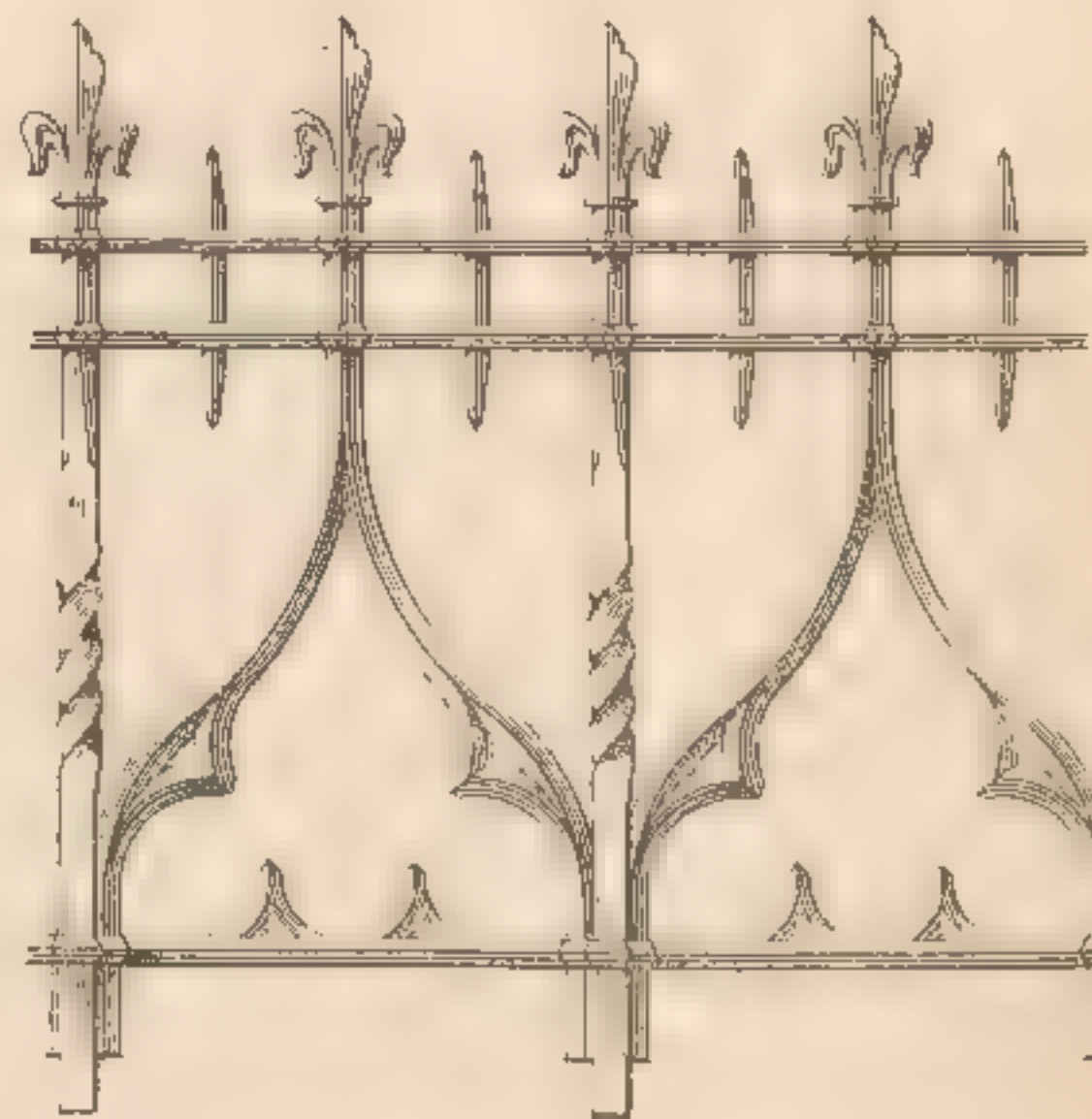
Nº 201



Nº 405



Nº 277

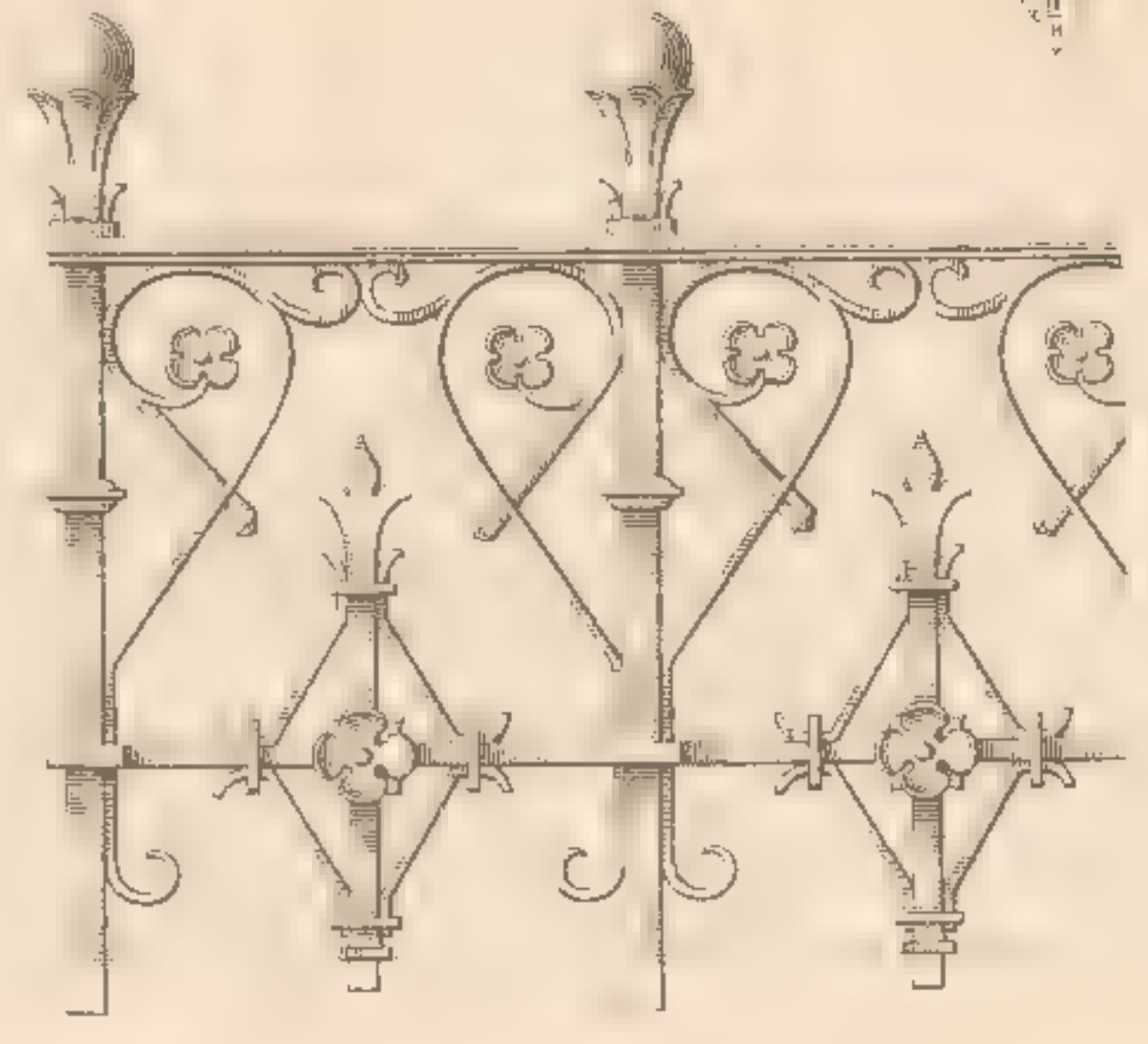
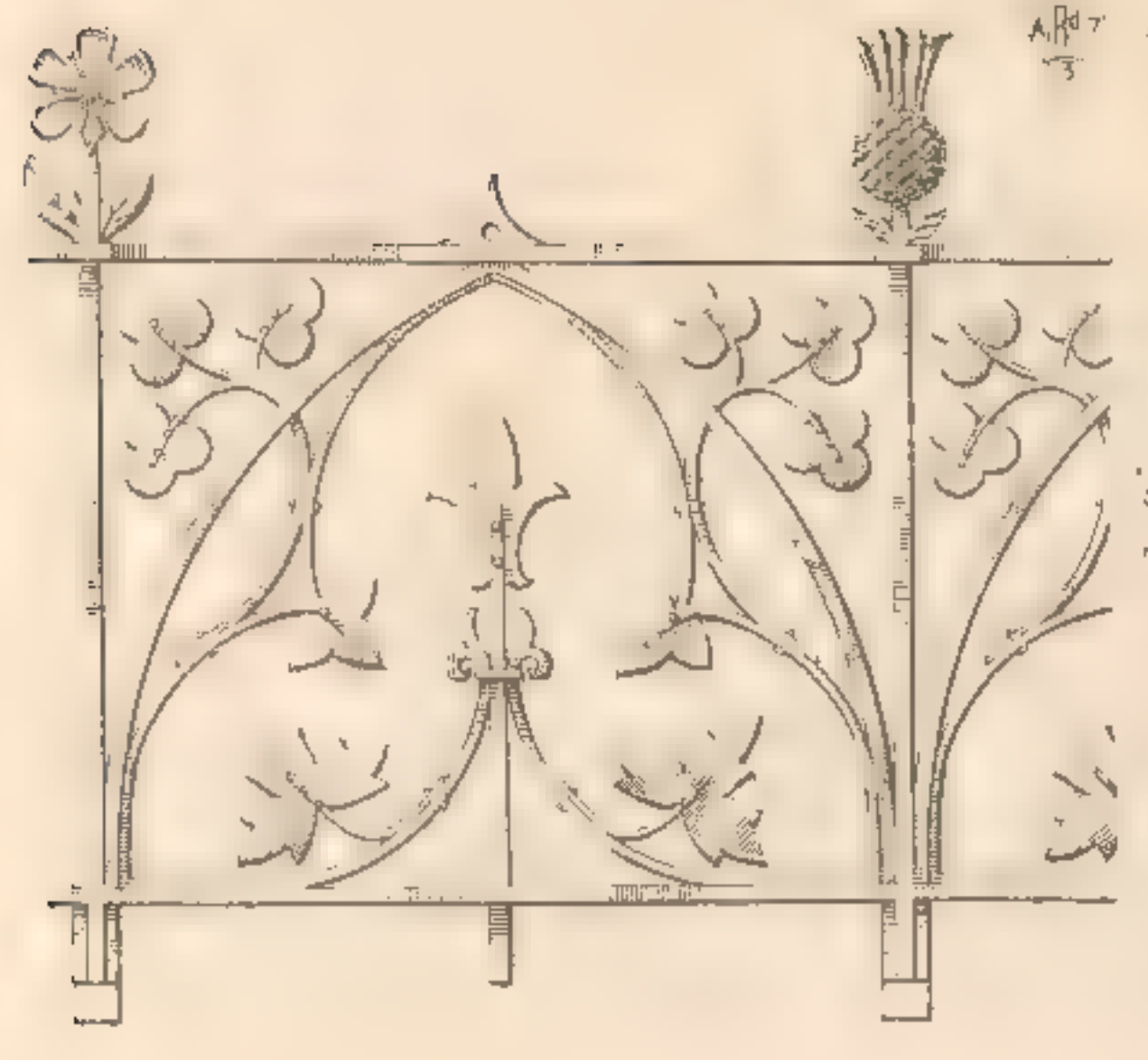


SCALE NCH FCG

MACFARLANE'S RAILING &c

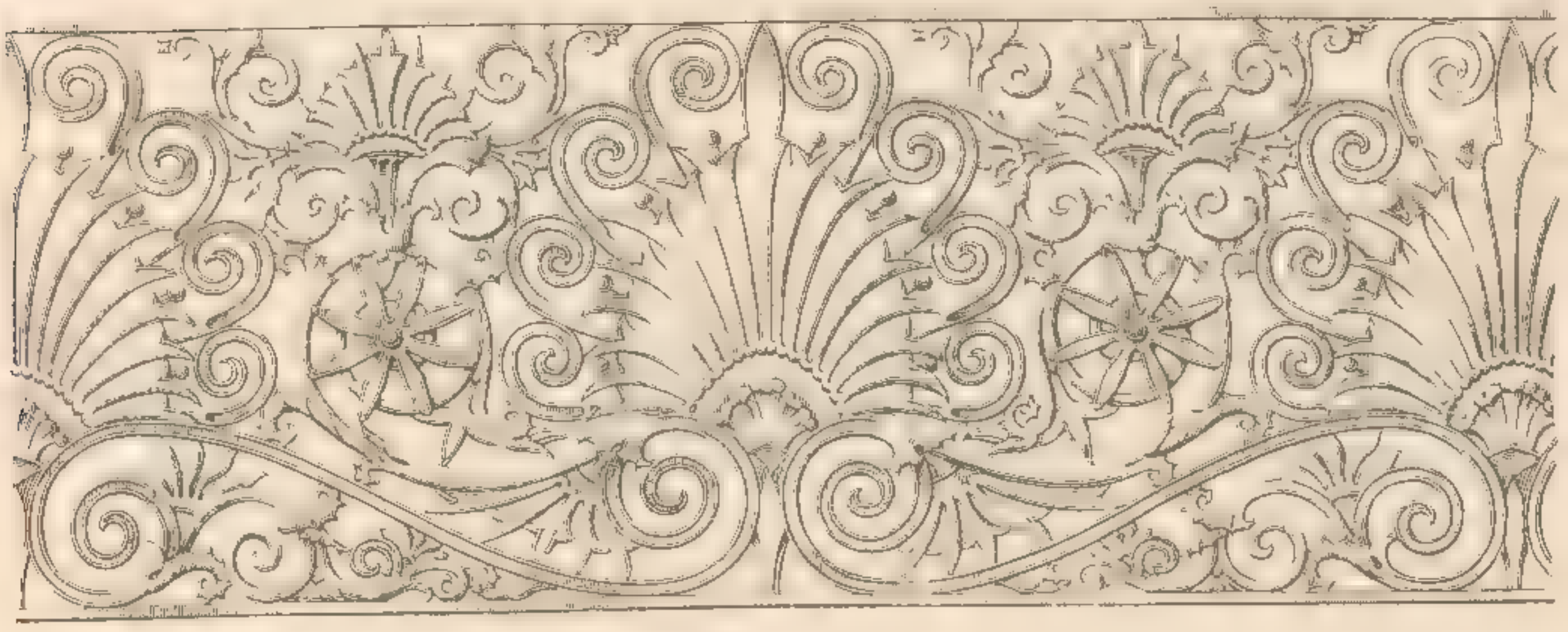
NO 30

NO 31



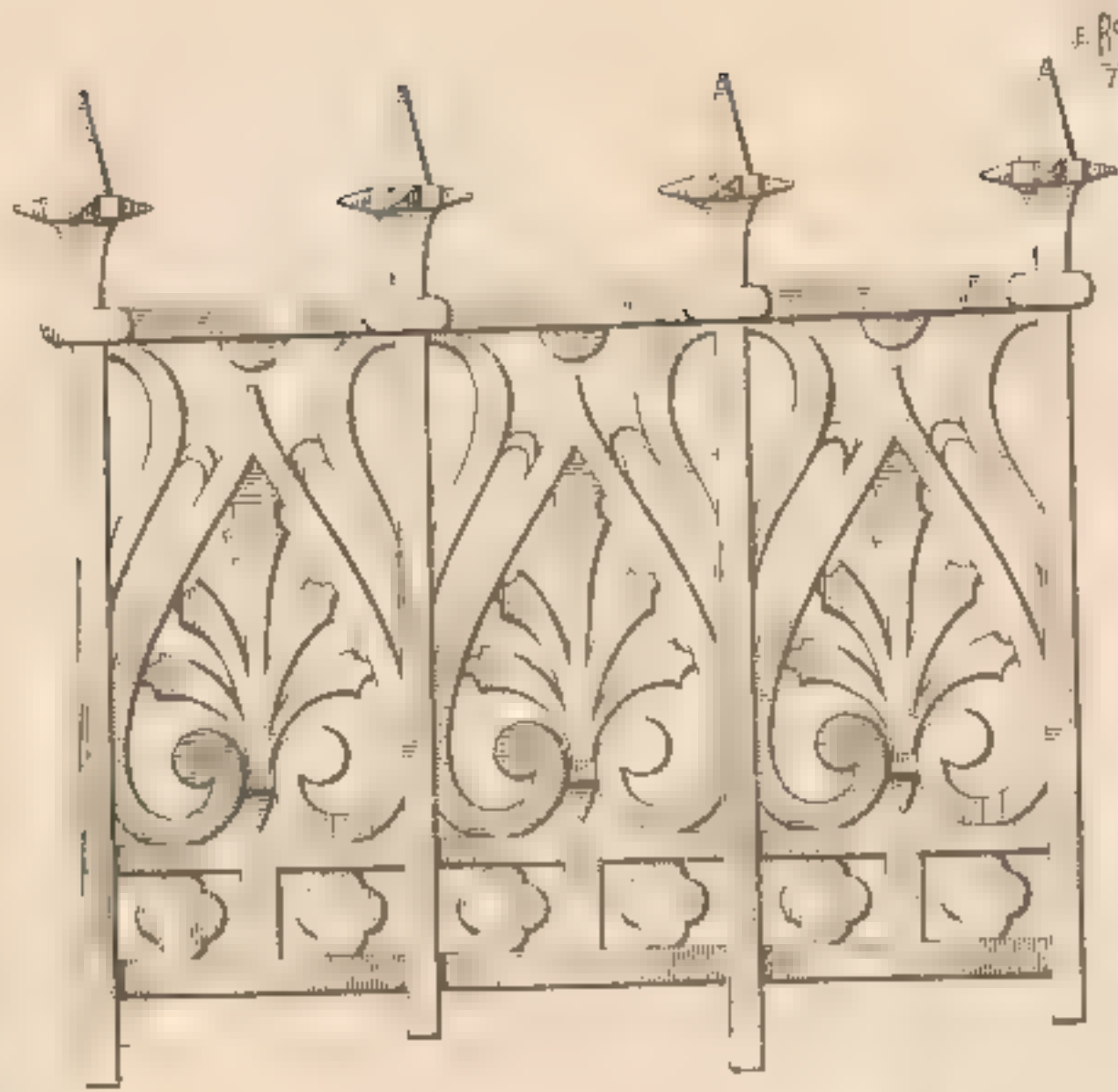
NO 32

NO 33

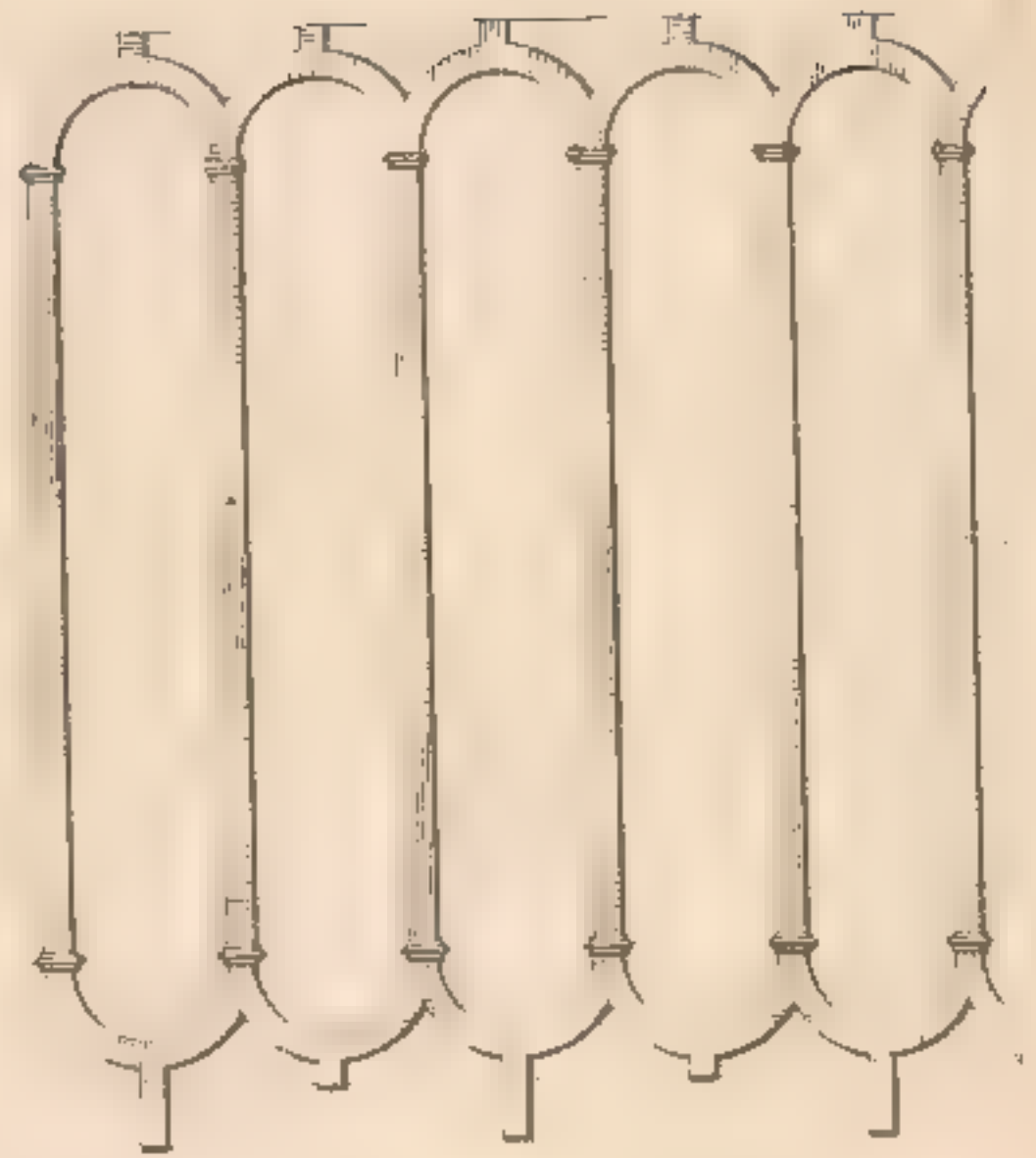


M. A. FARLANE & SONS

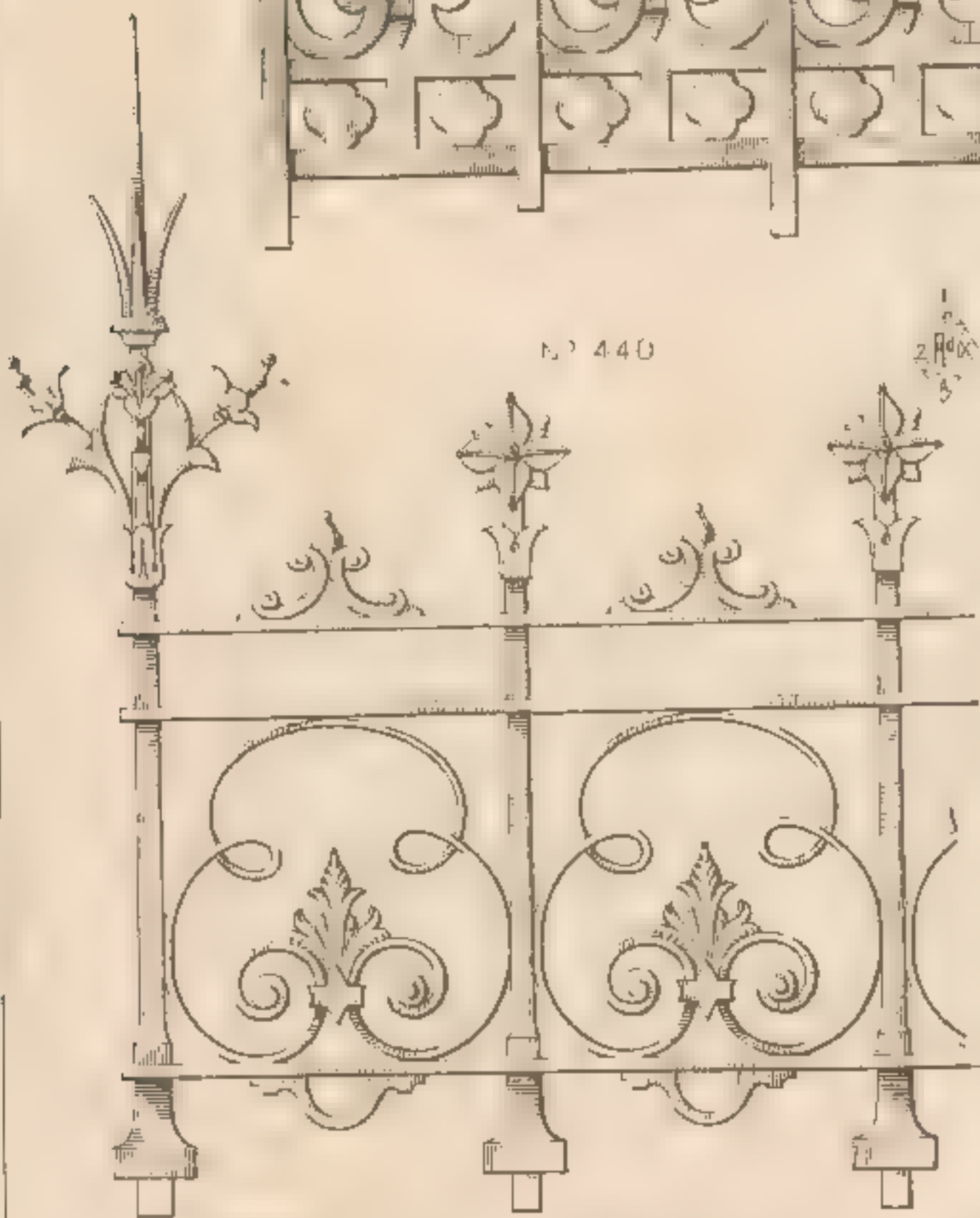
N^o 84



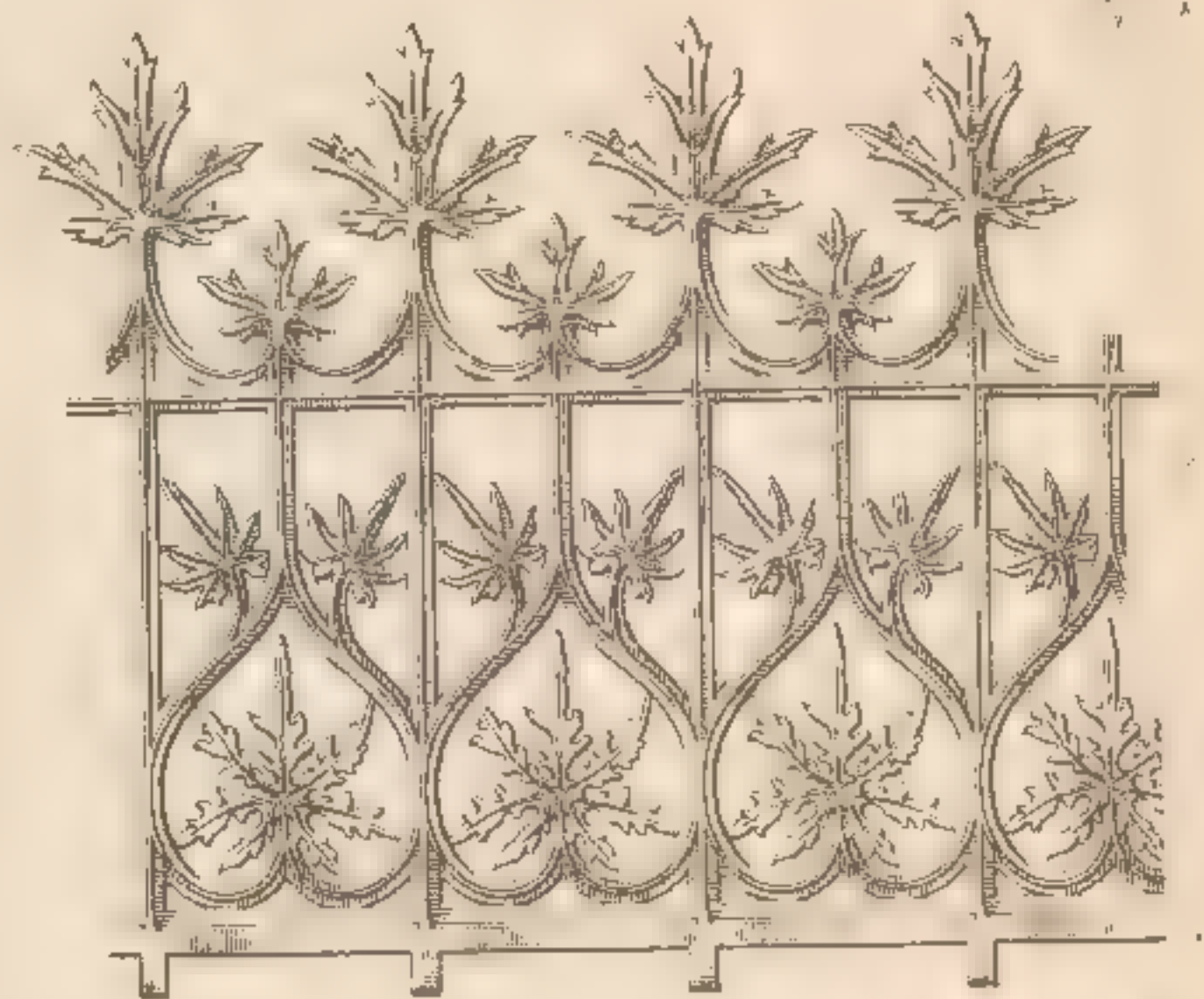
N^o 79



N^o 440

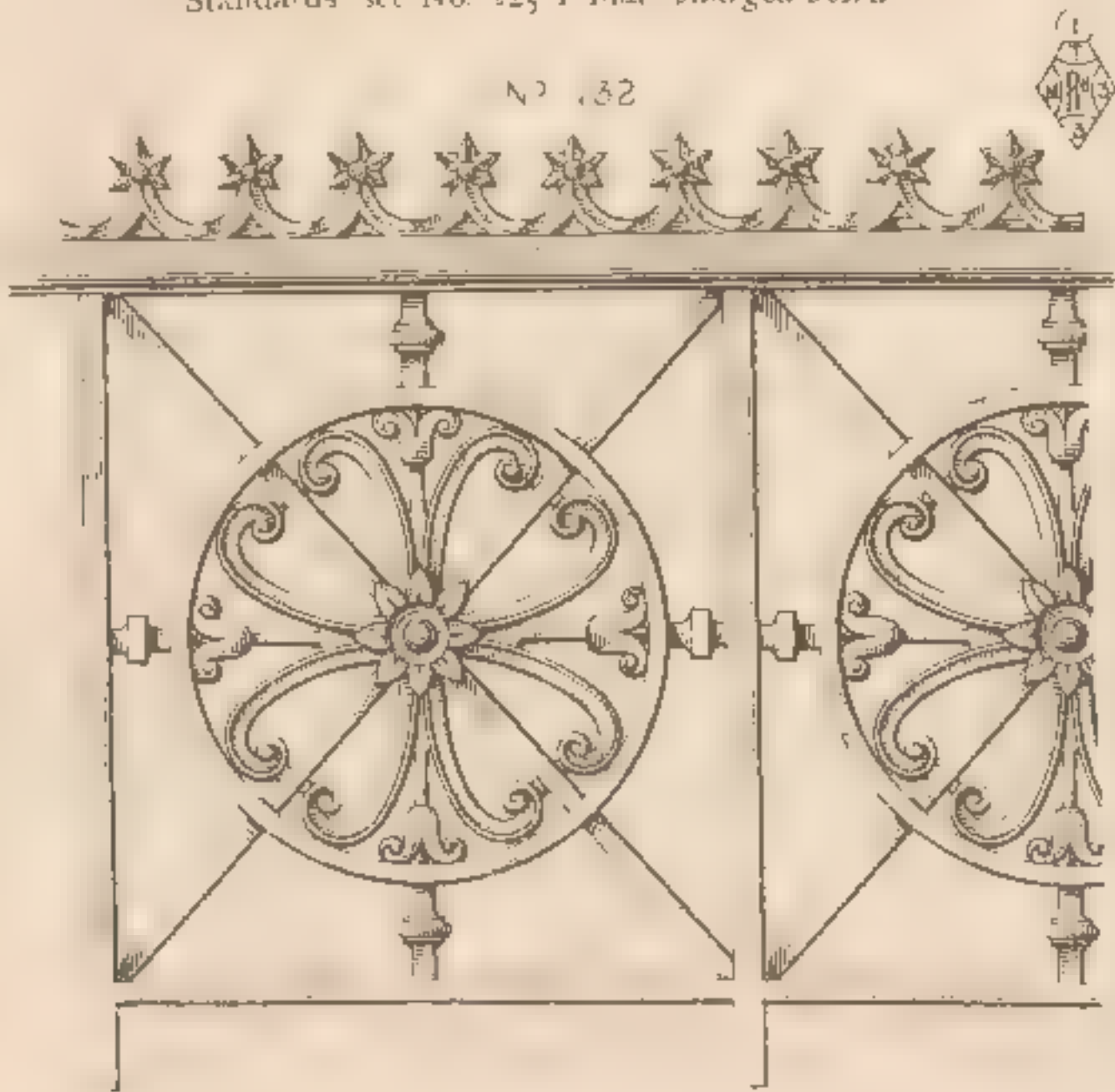


N^o 65

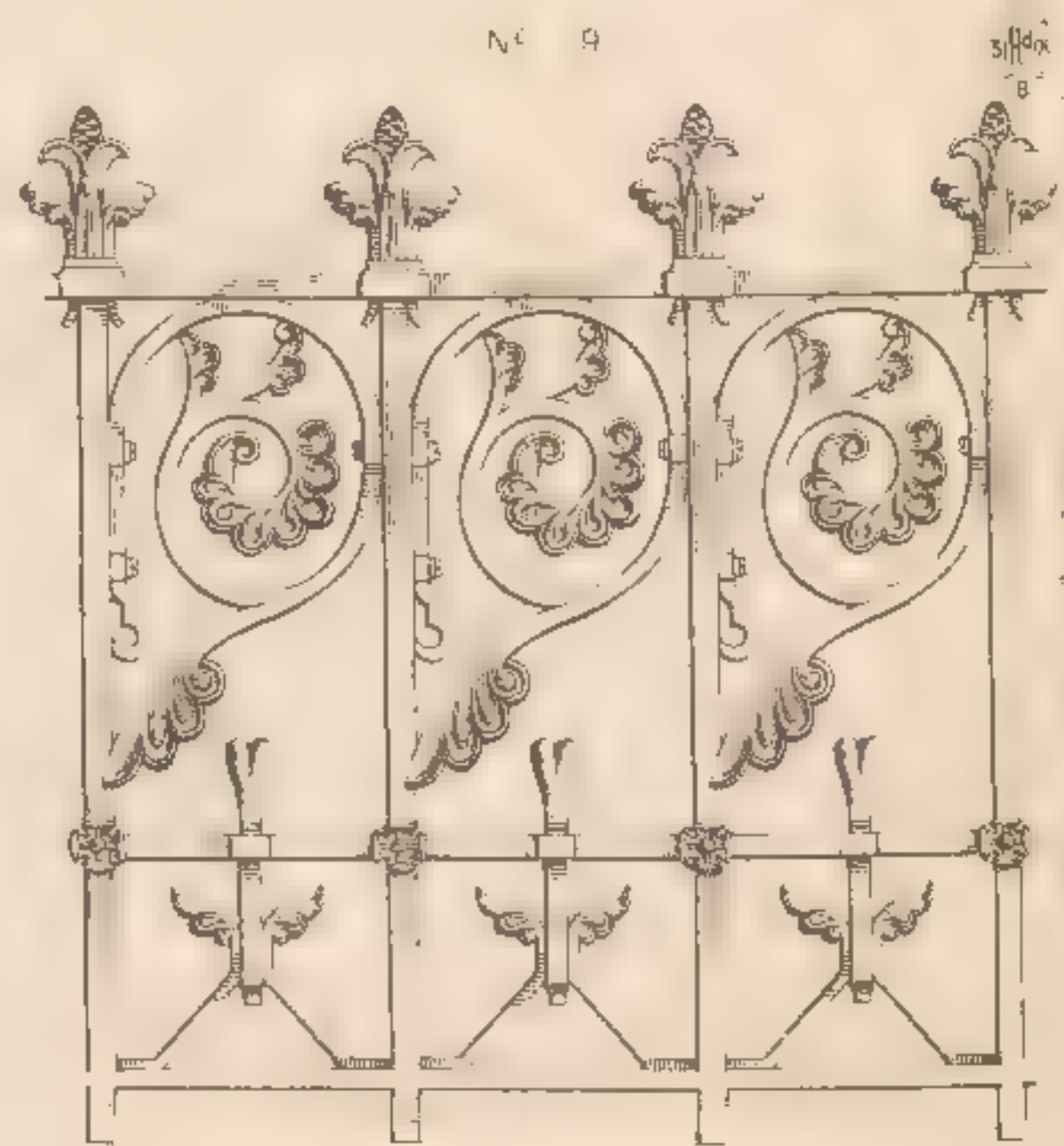


Standards see No. 225 Finial charged extra

N^o 132



N^o 9

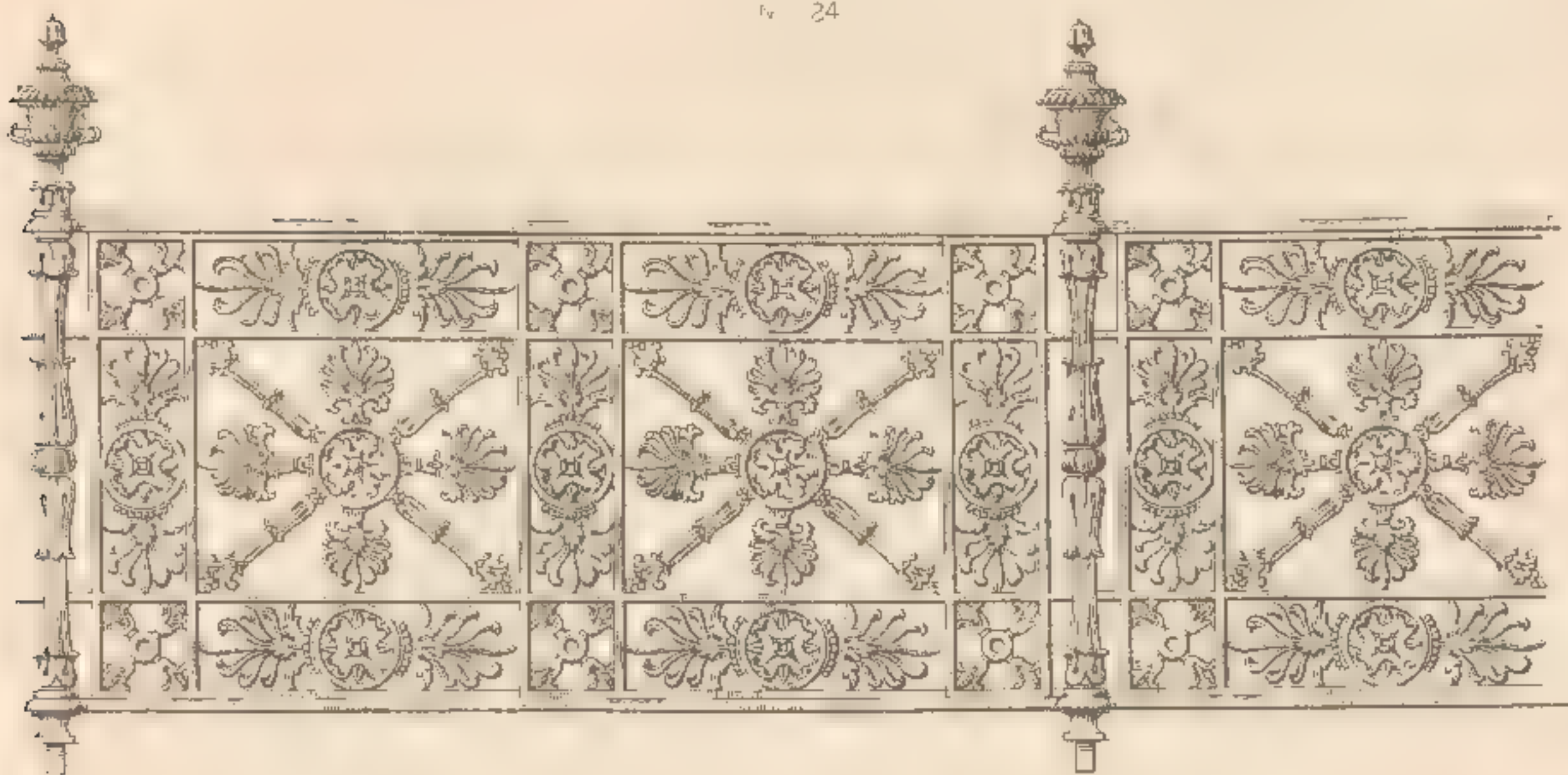


ALE NCH

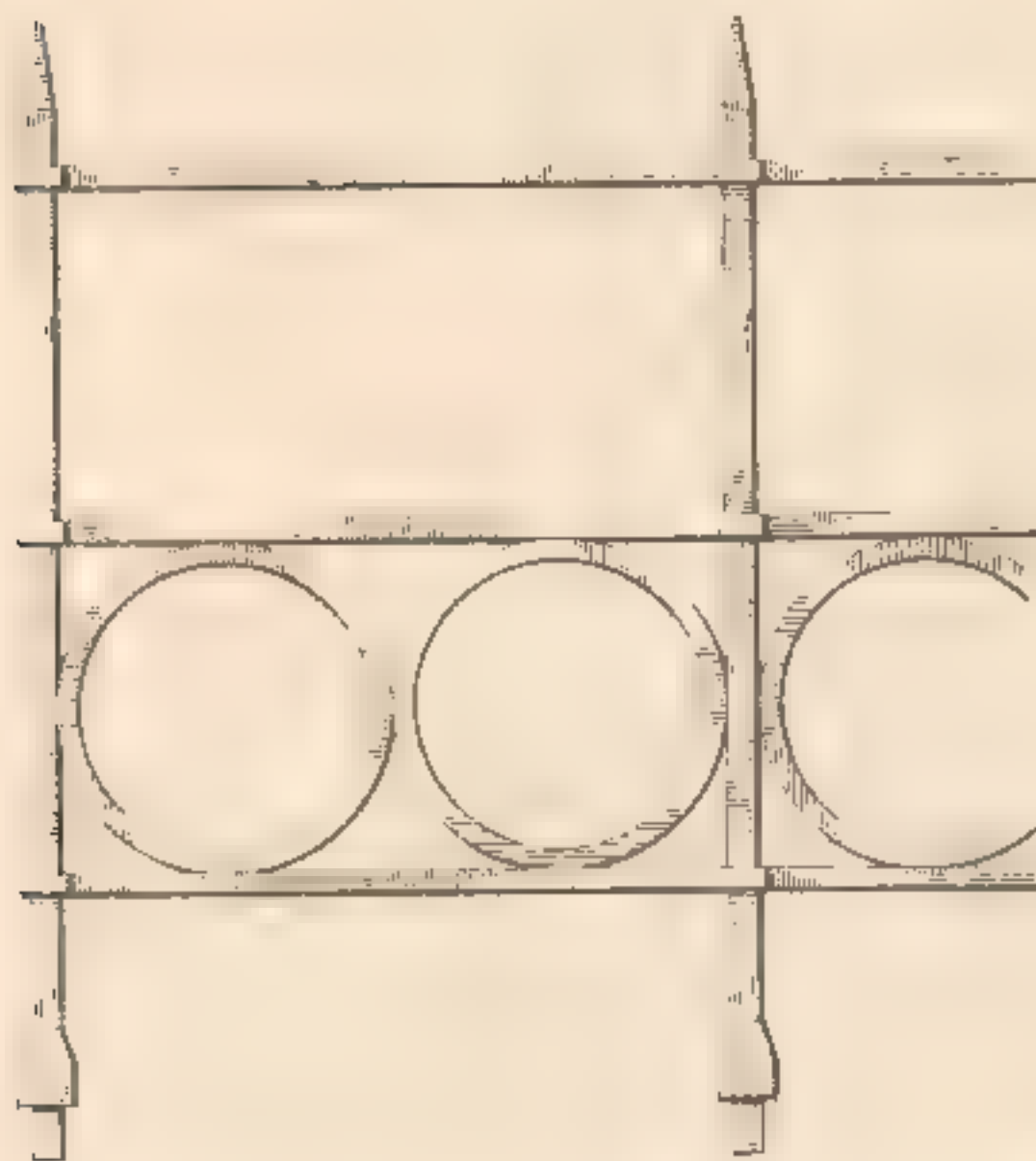
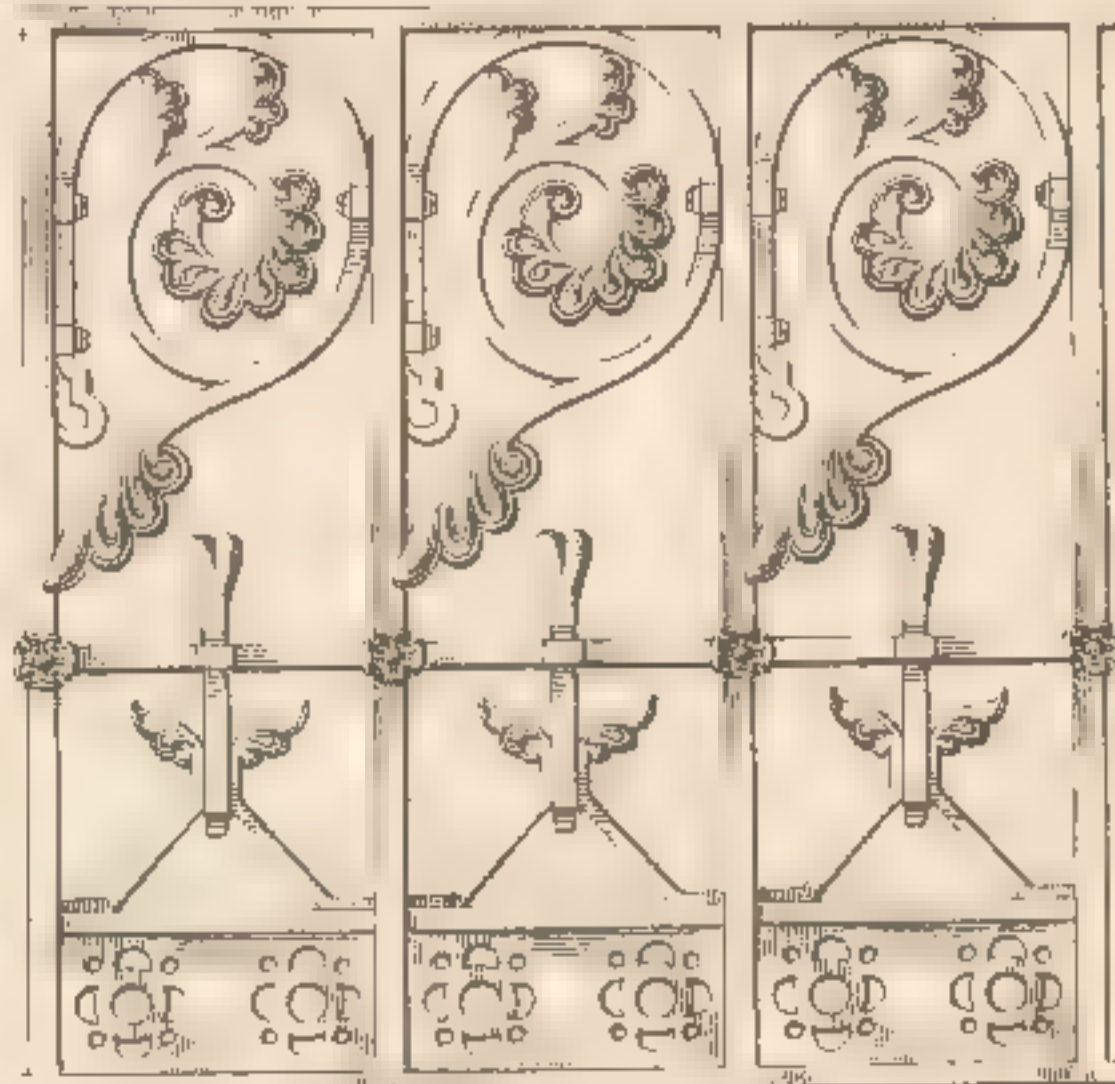
FOOT

MACFARLANE'S RAILING & CO

No 24

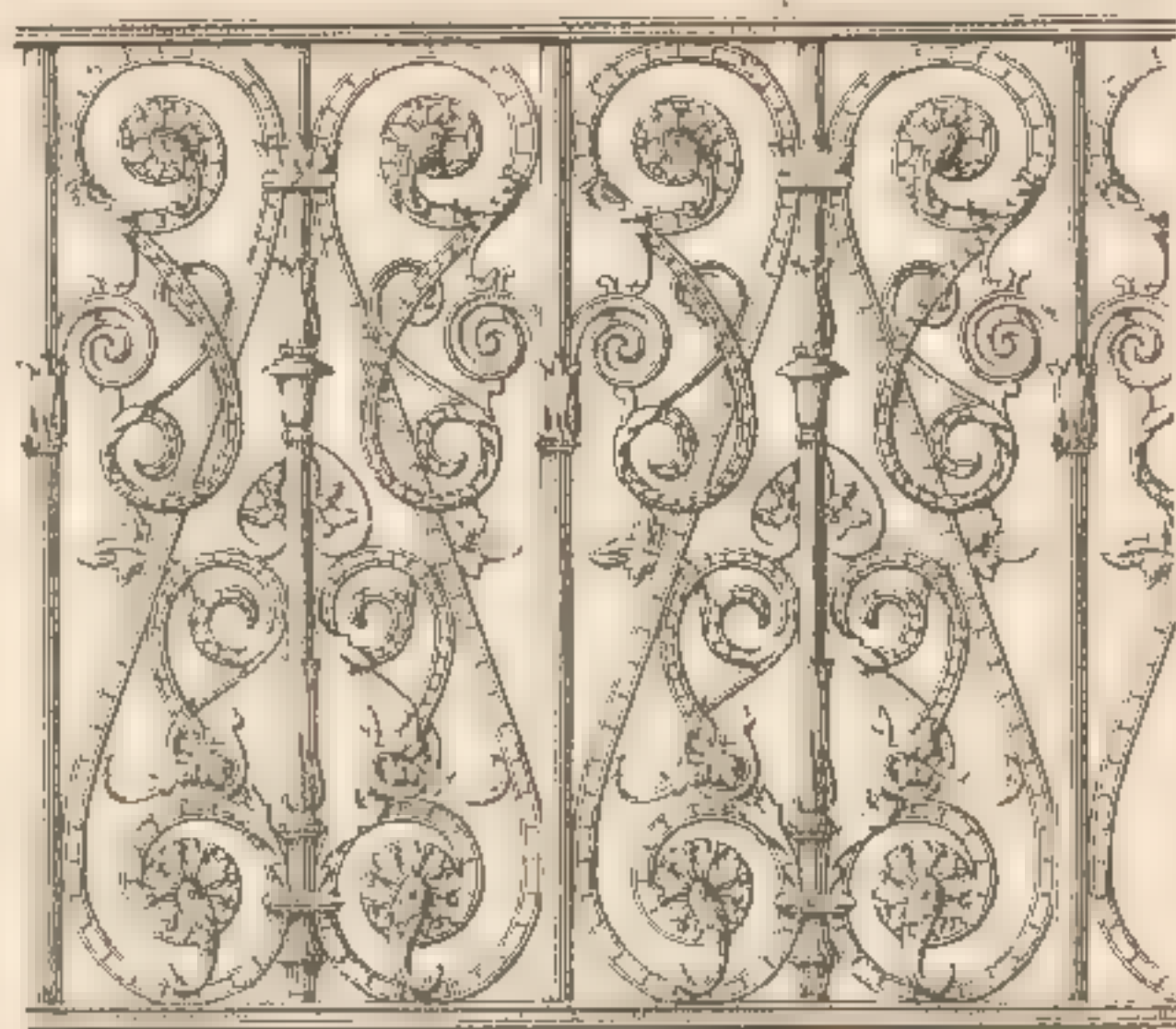
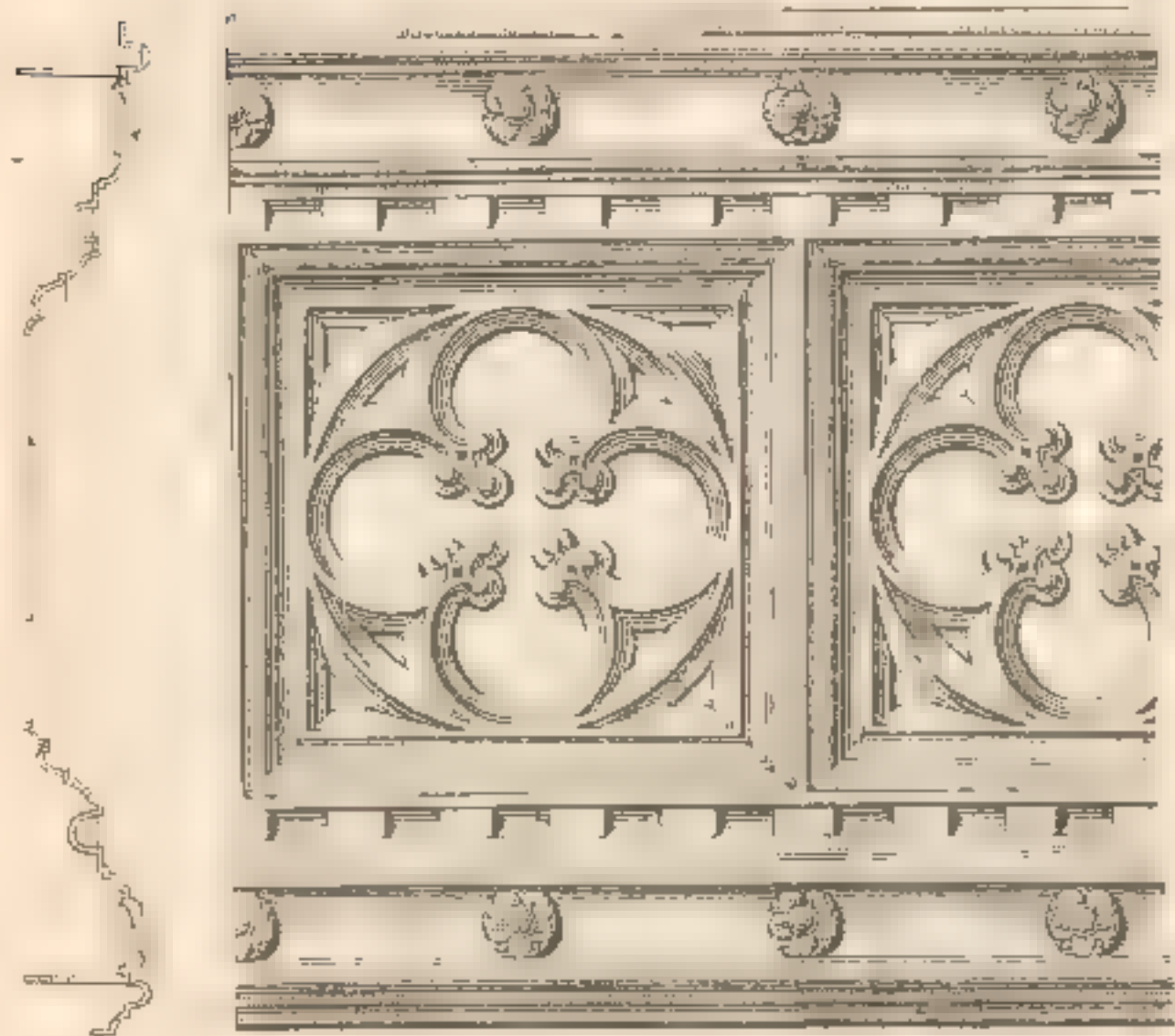


No 91



No 46

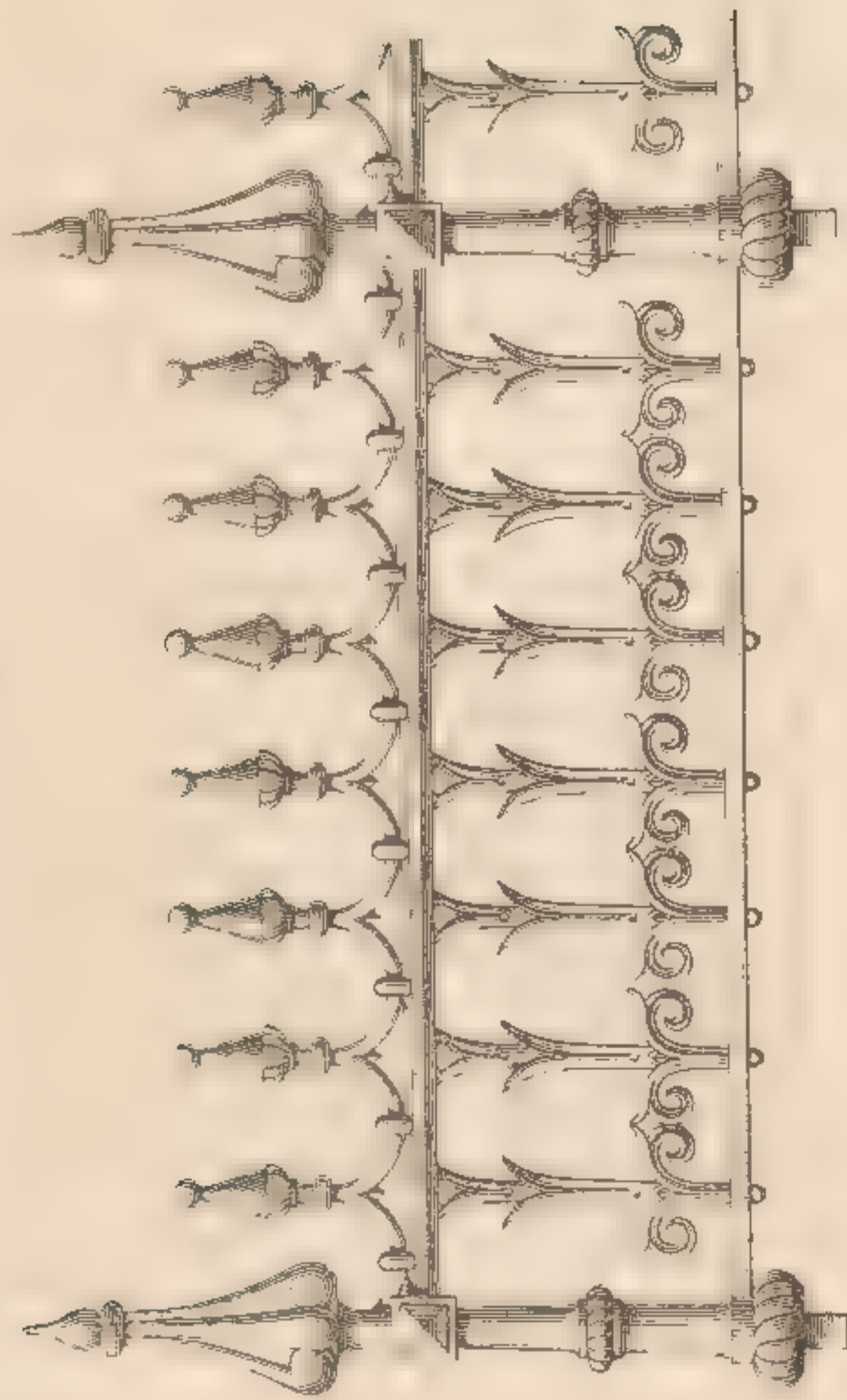
No 63



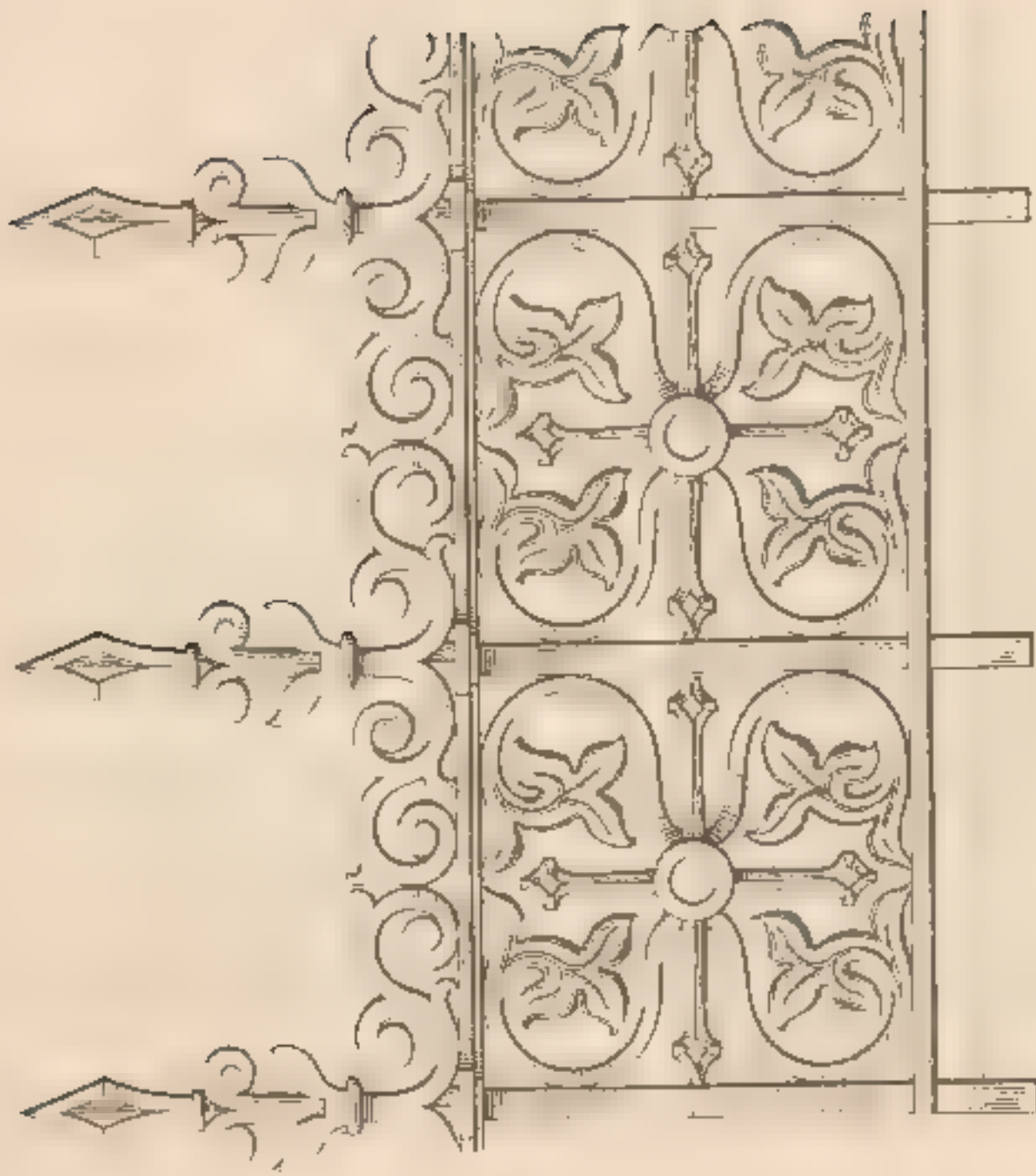
SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING & CO

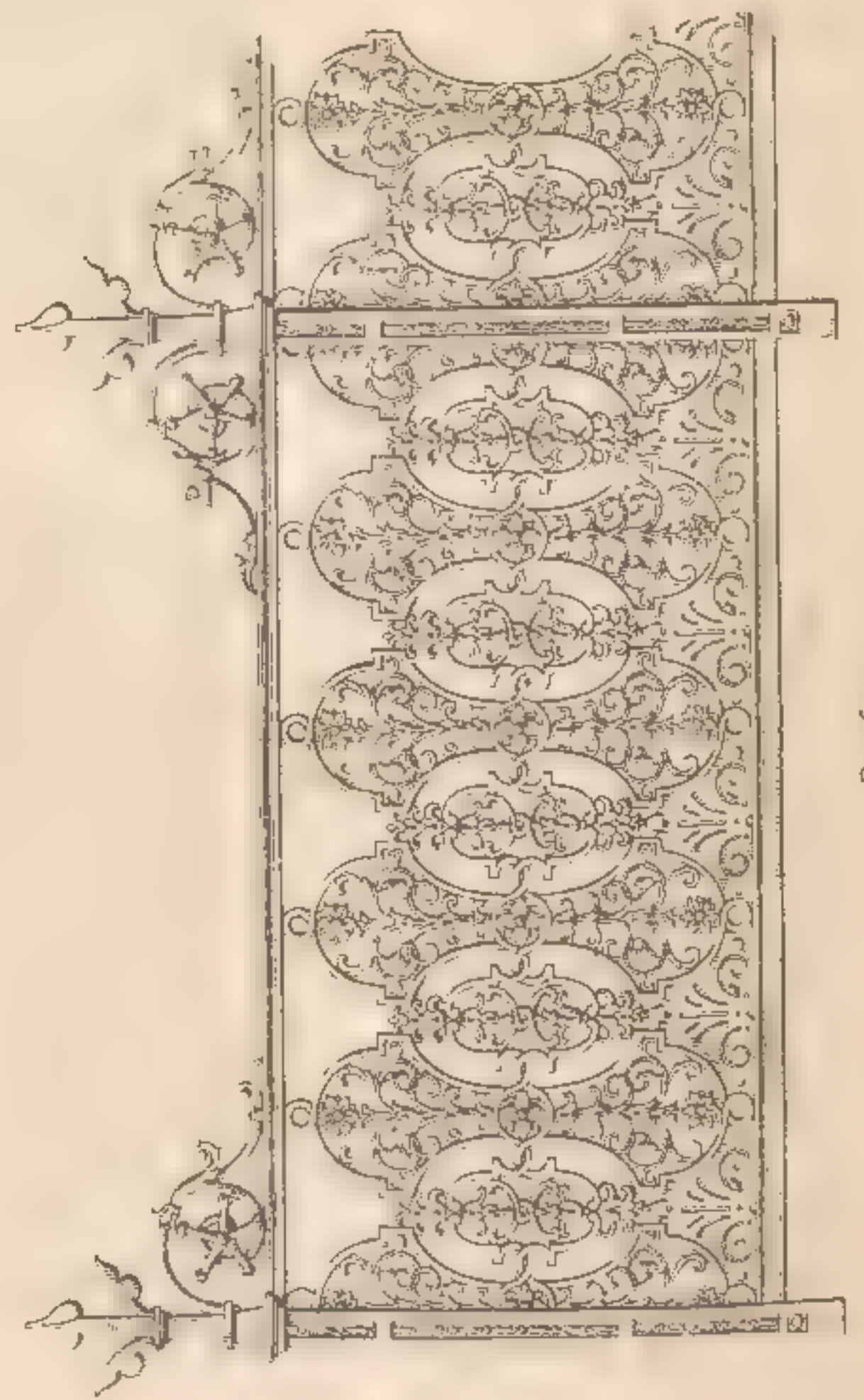
N 47



N 6

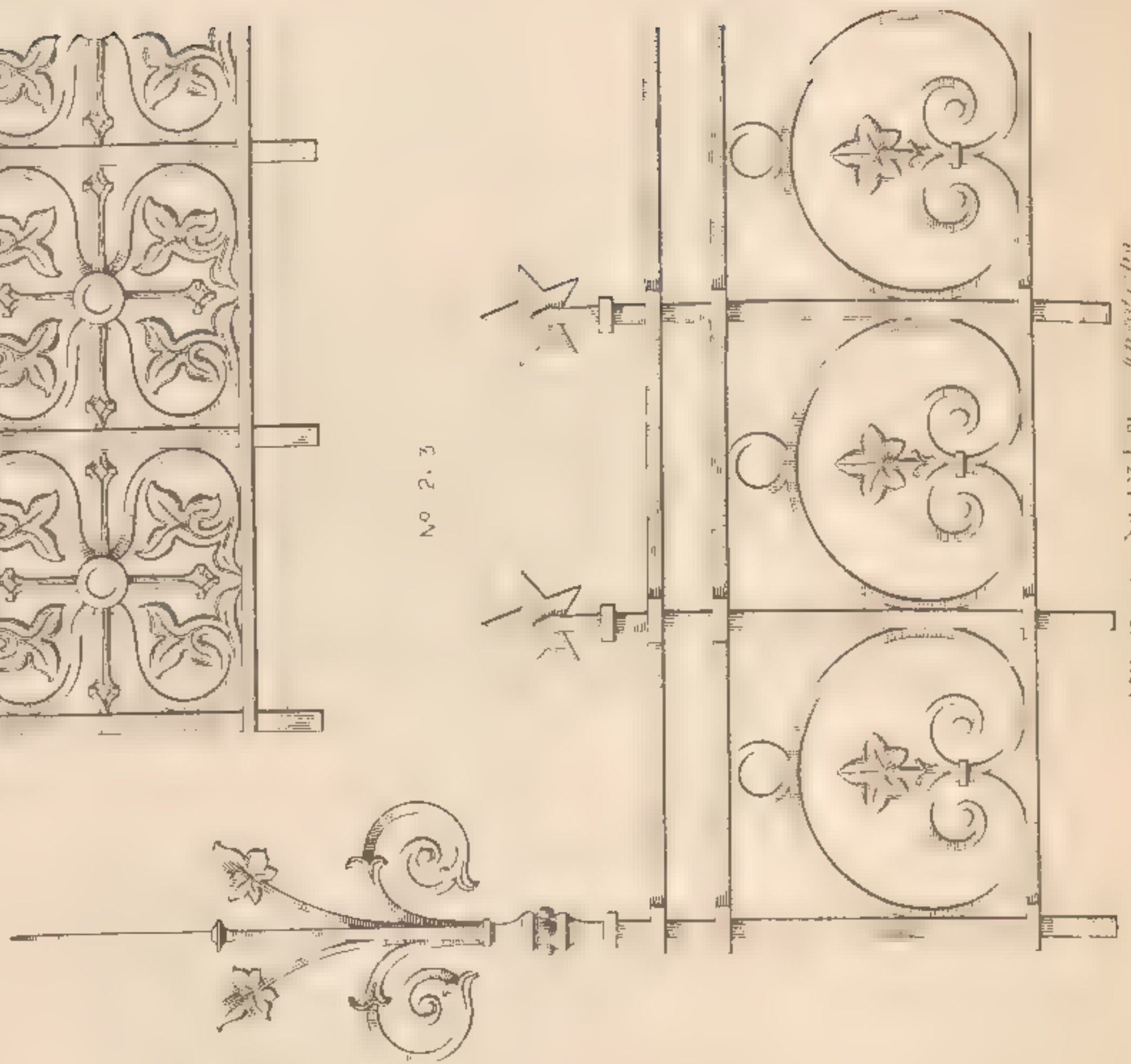


N 46



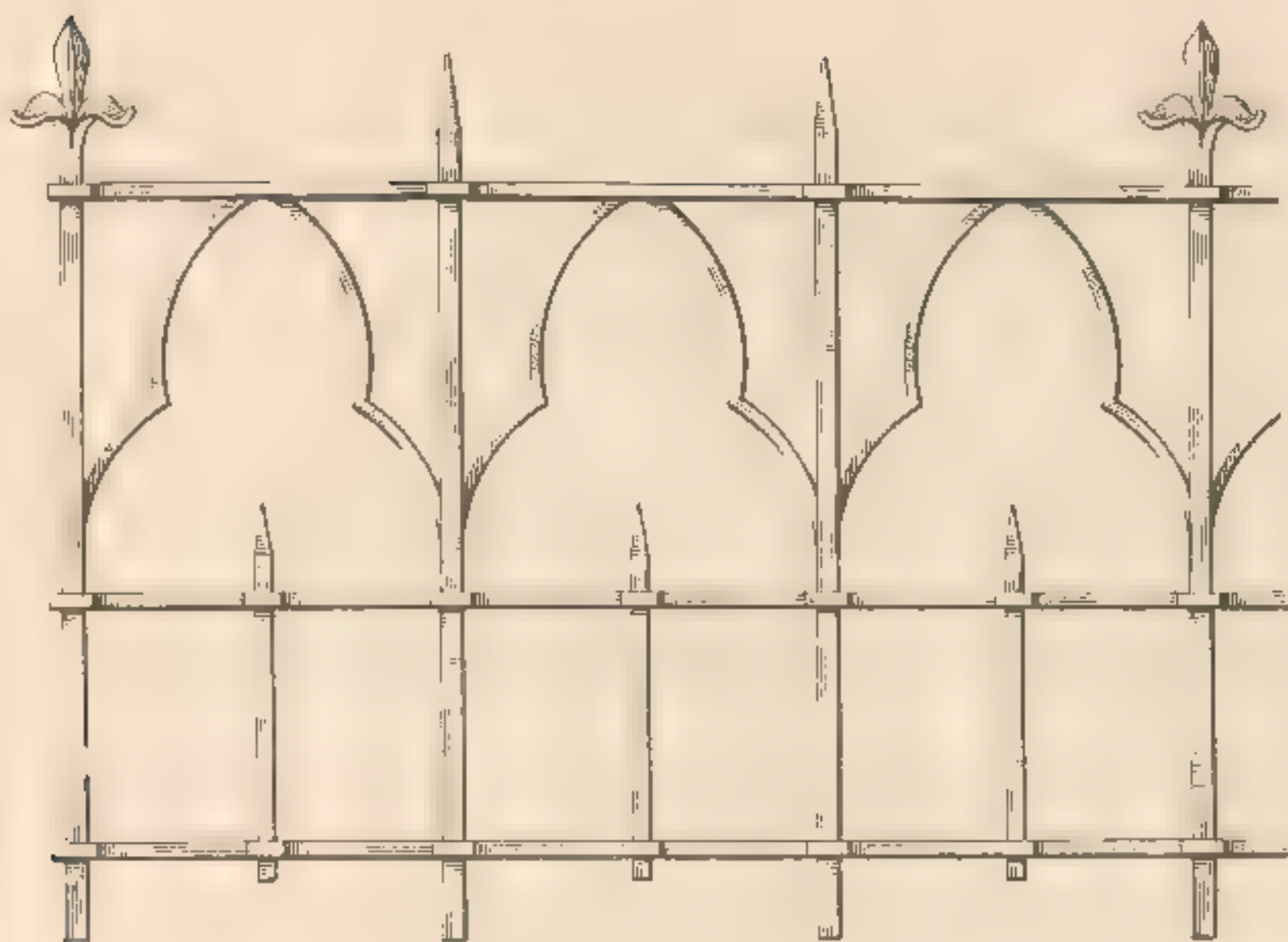
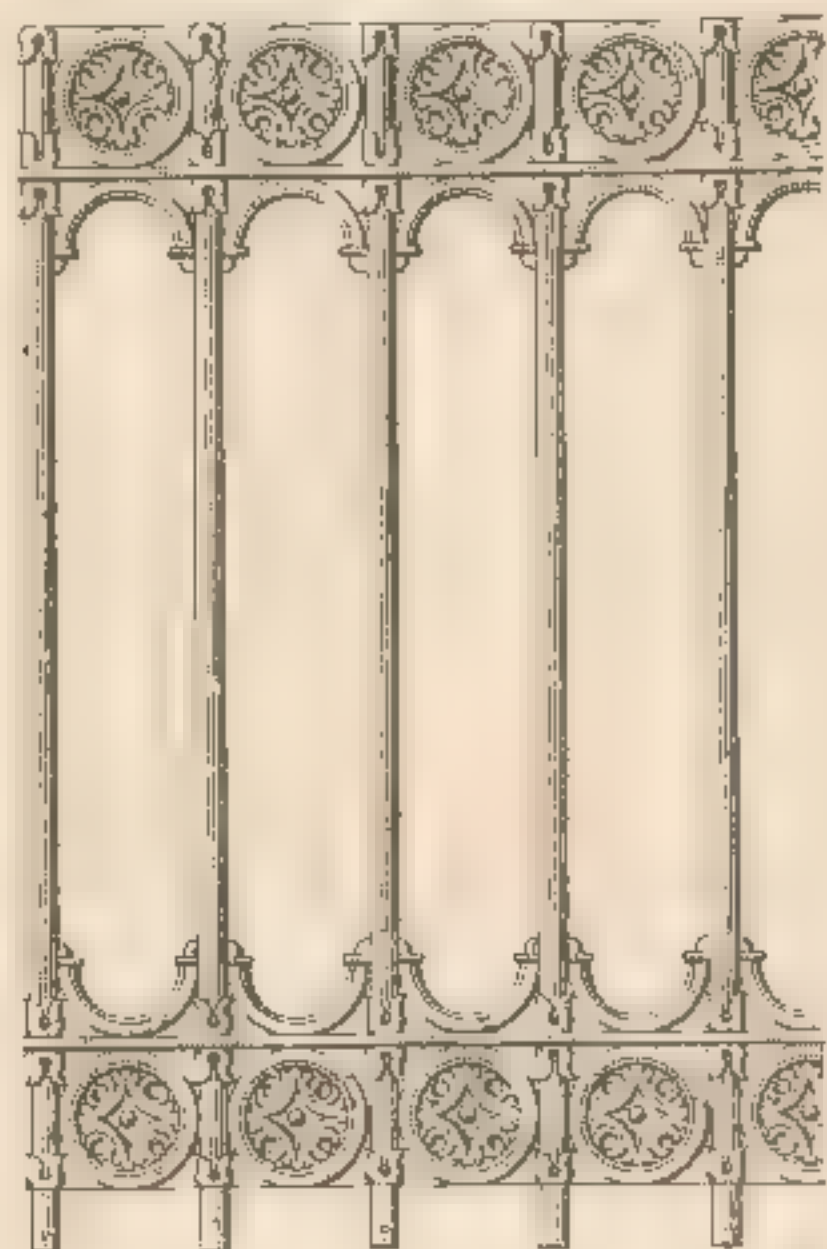
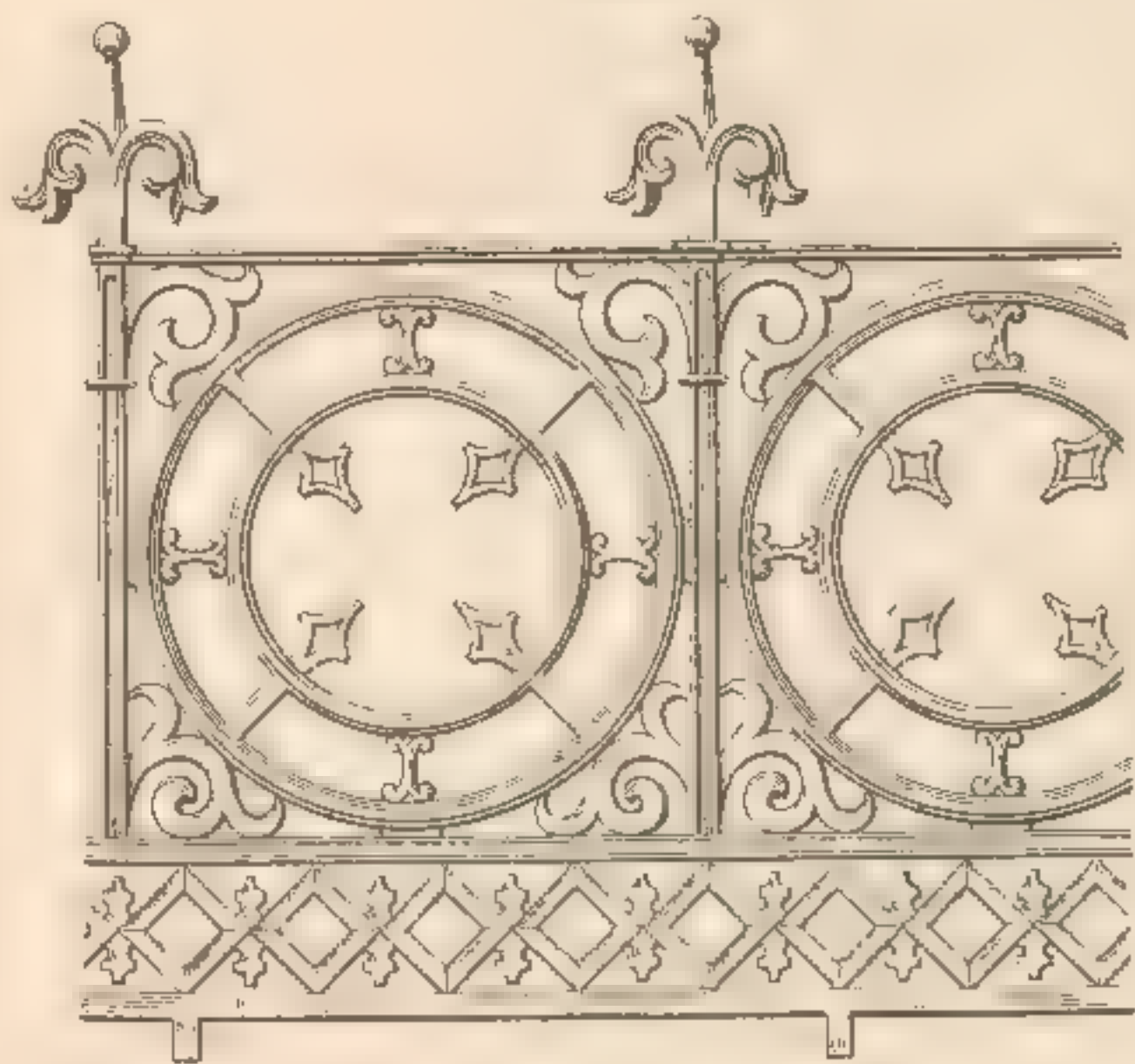
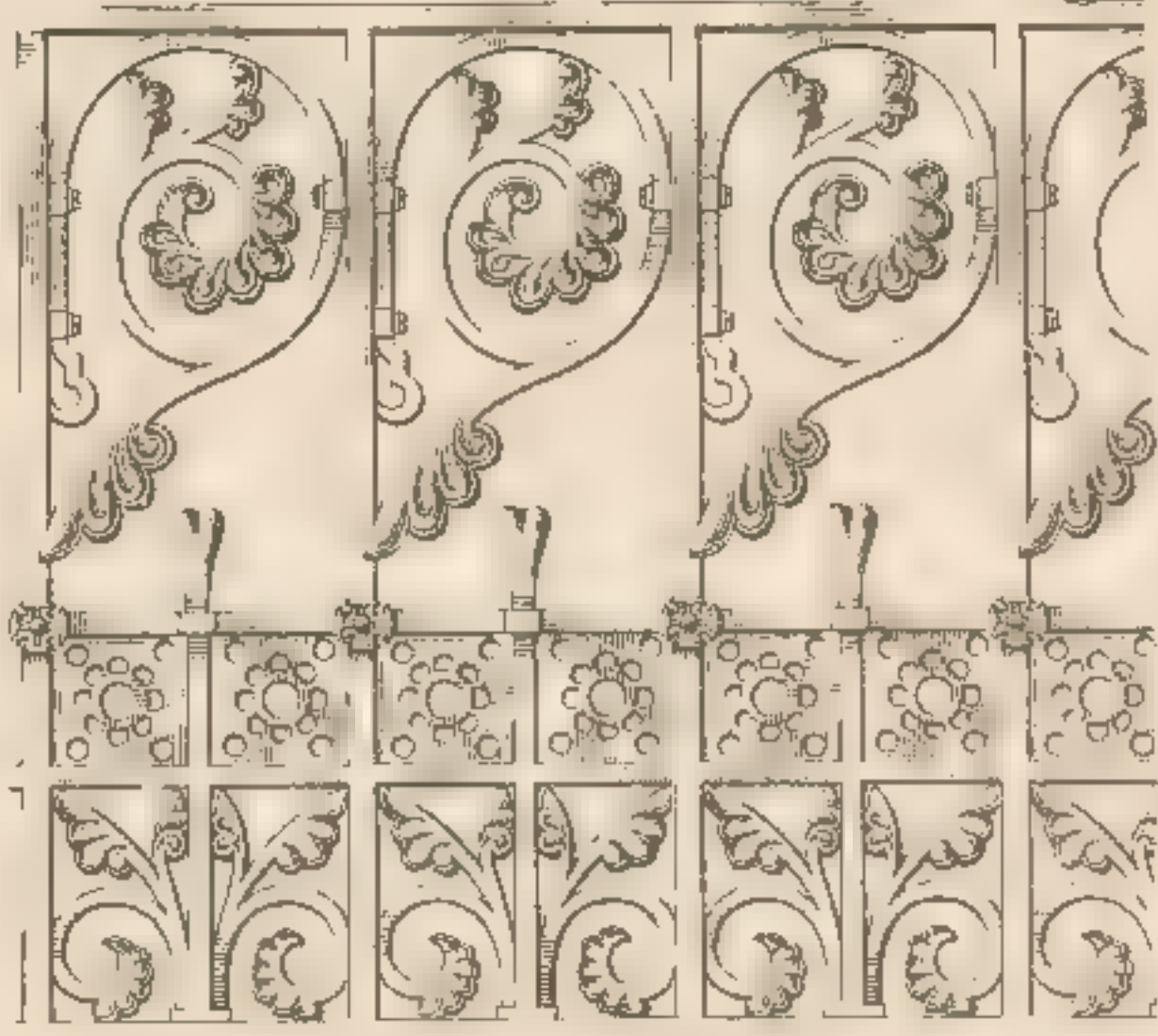
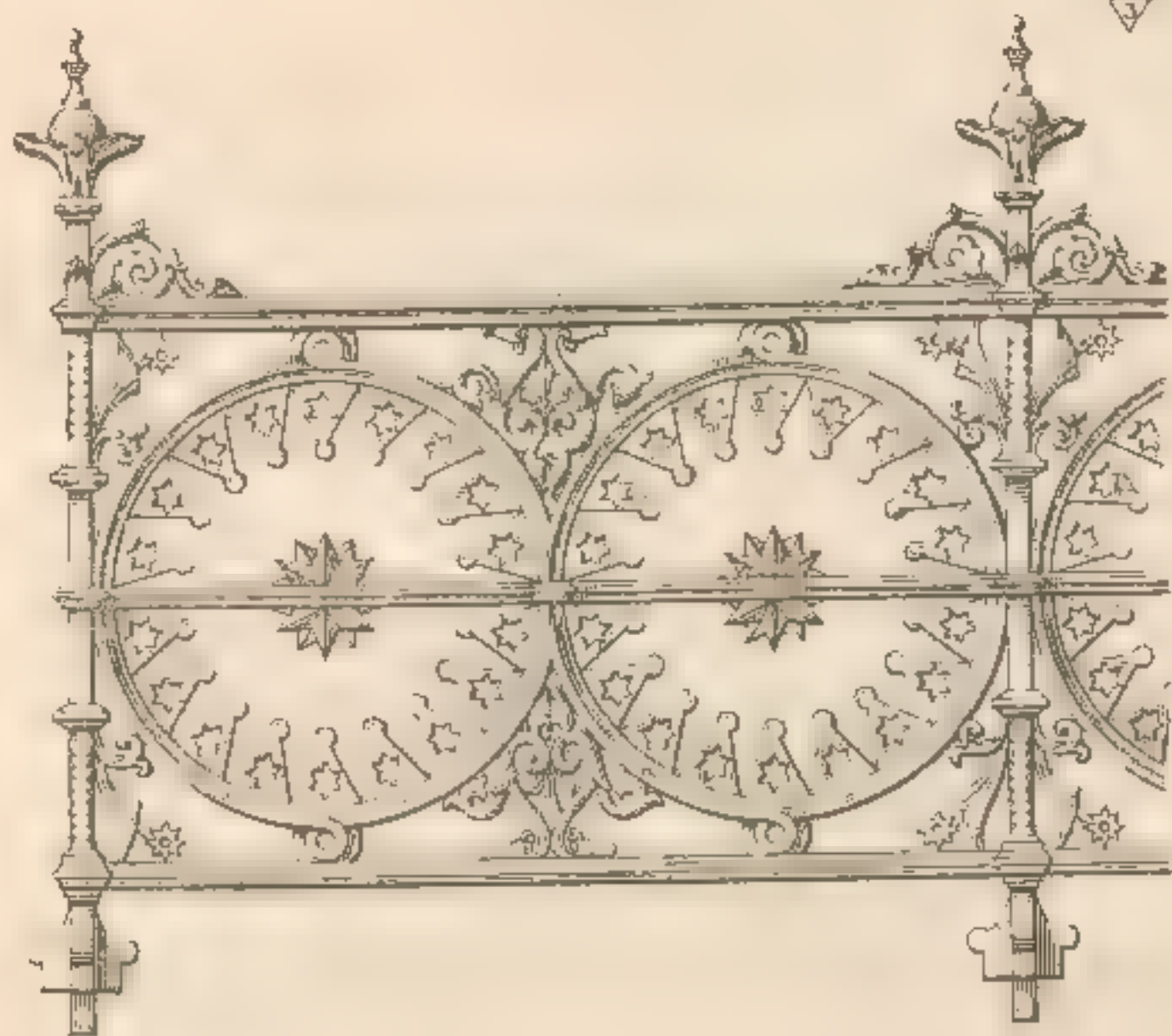
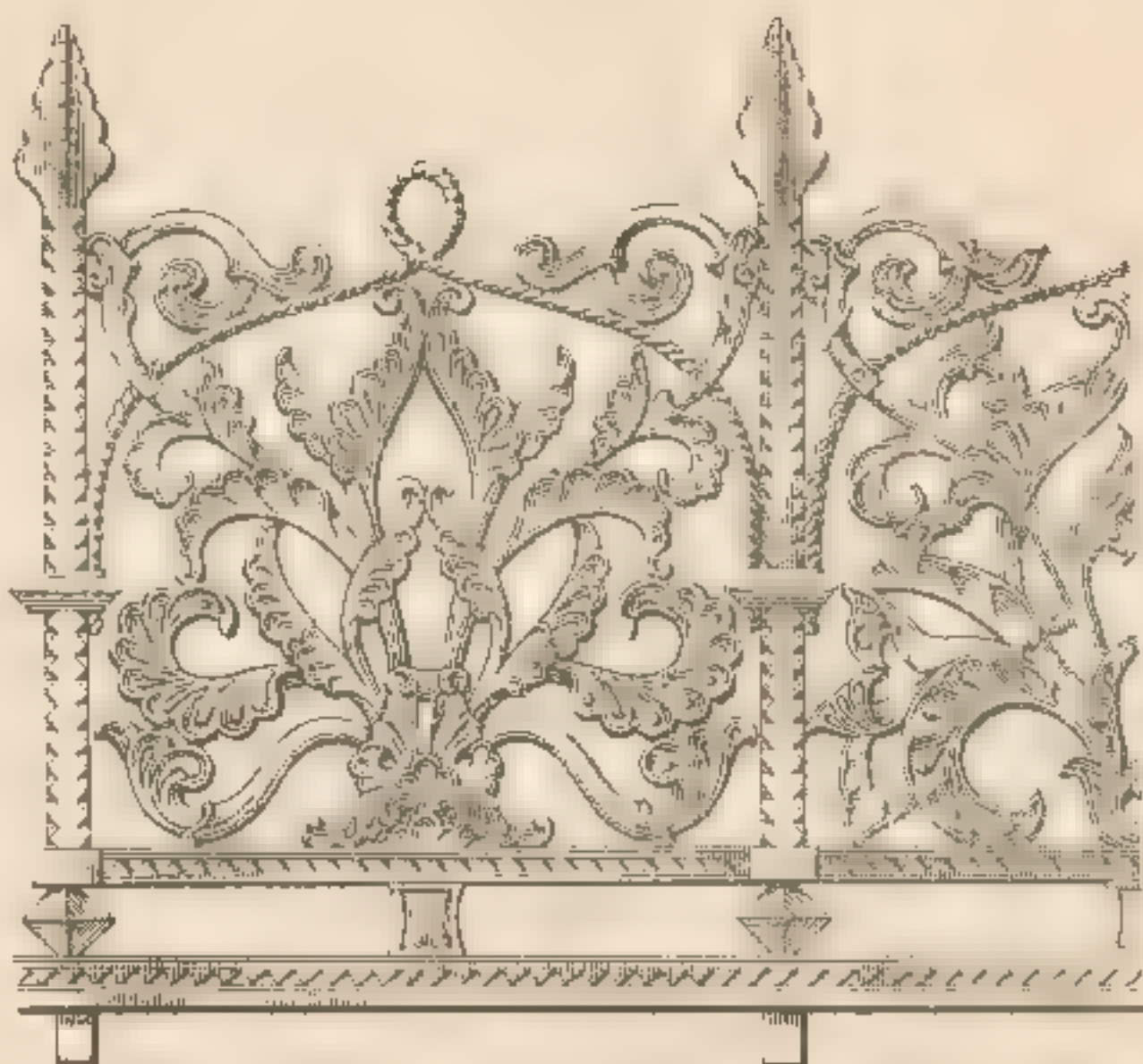
One foot

N 2.3



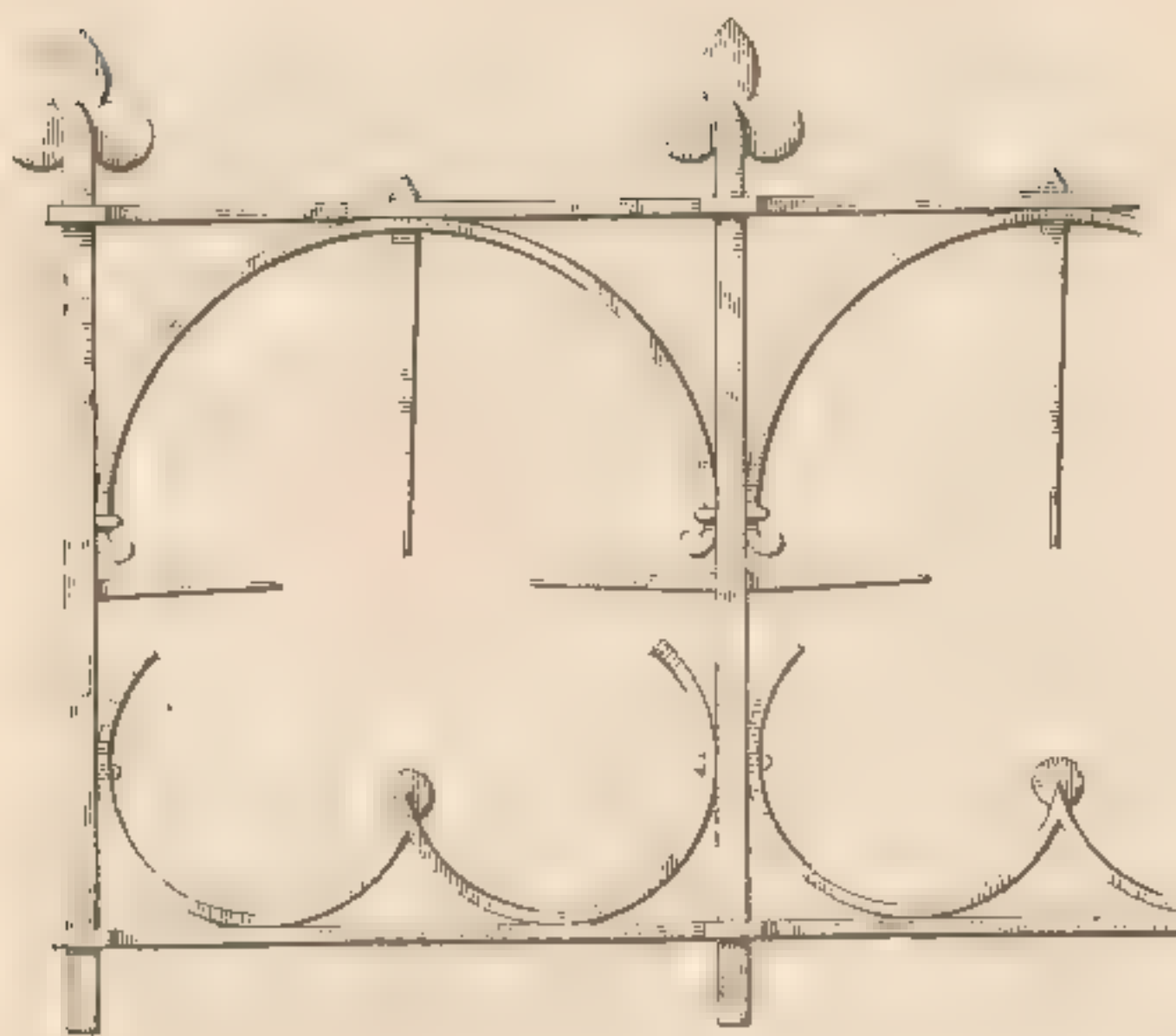
One foot

MACFARLANE'S RAILING & CO

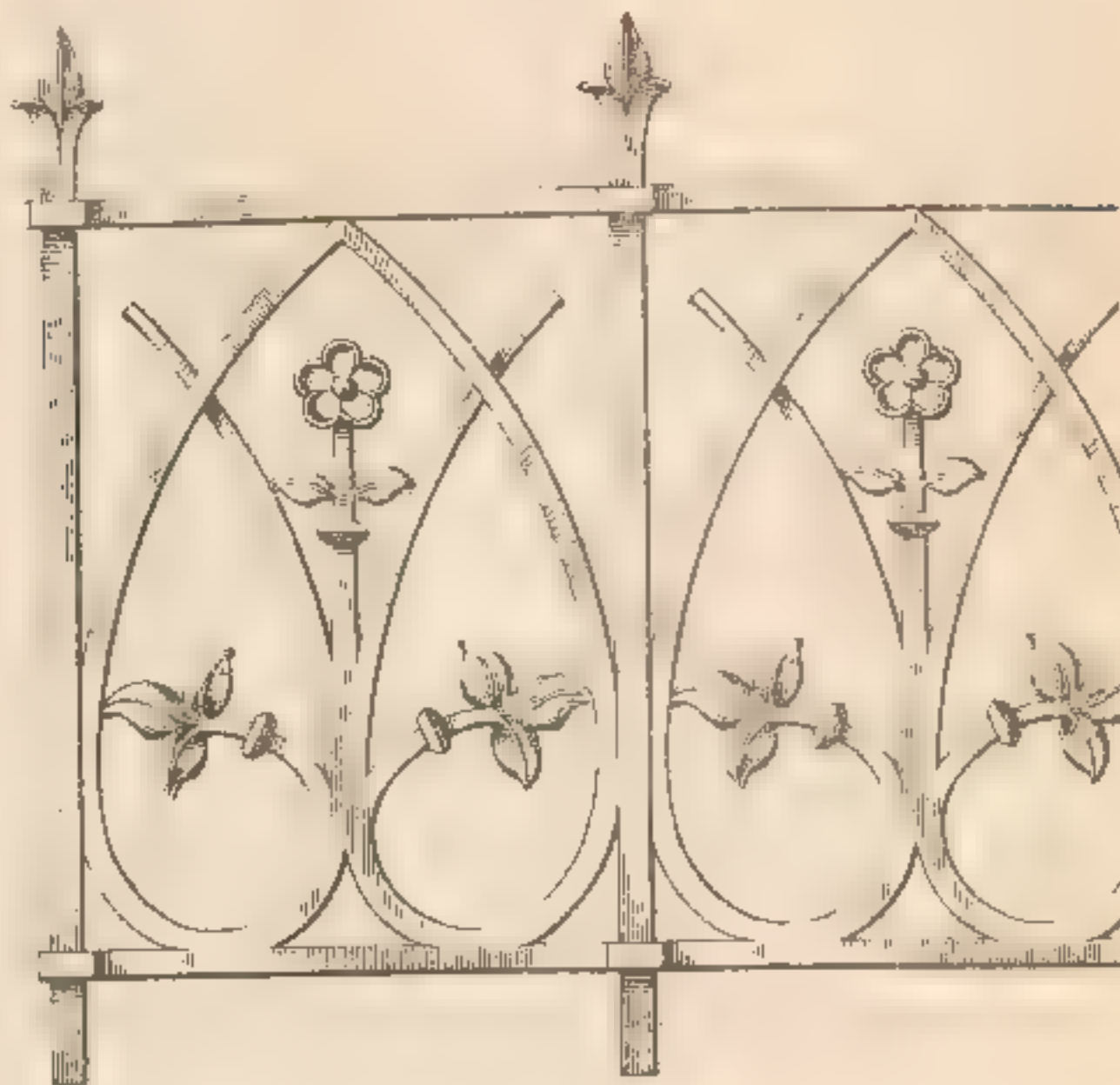
N^o 73N^o 375N^o 4N^o 2N^o 104N^o 36

SCALE | INCH = | FOOT

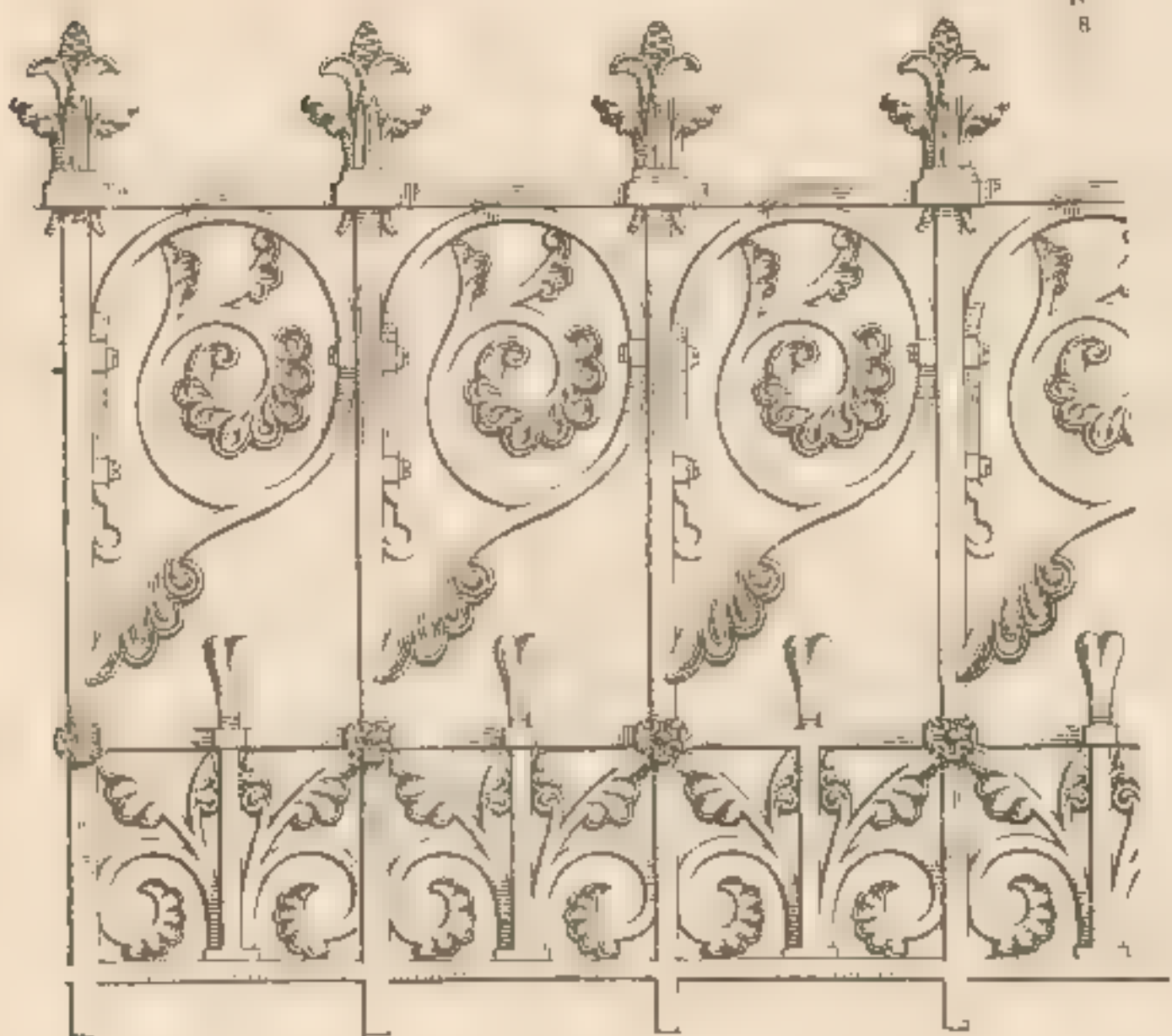
N^o 377



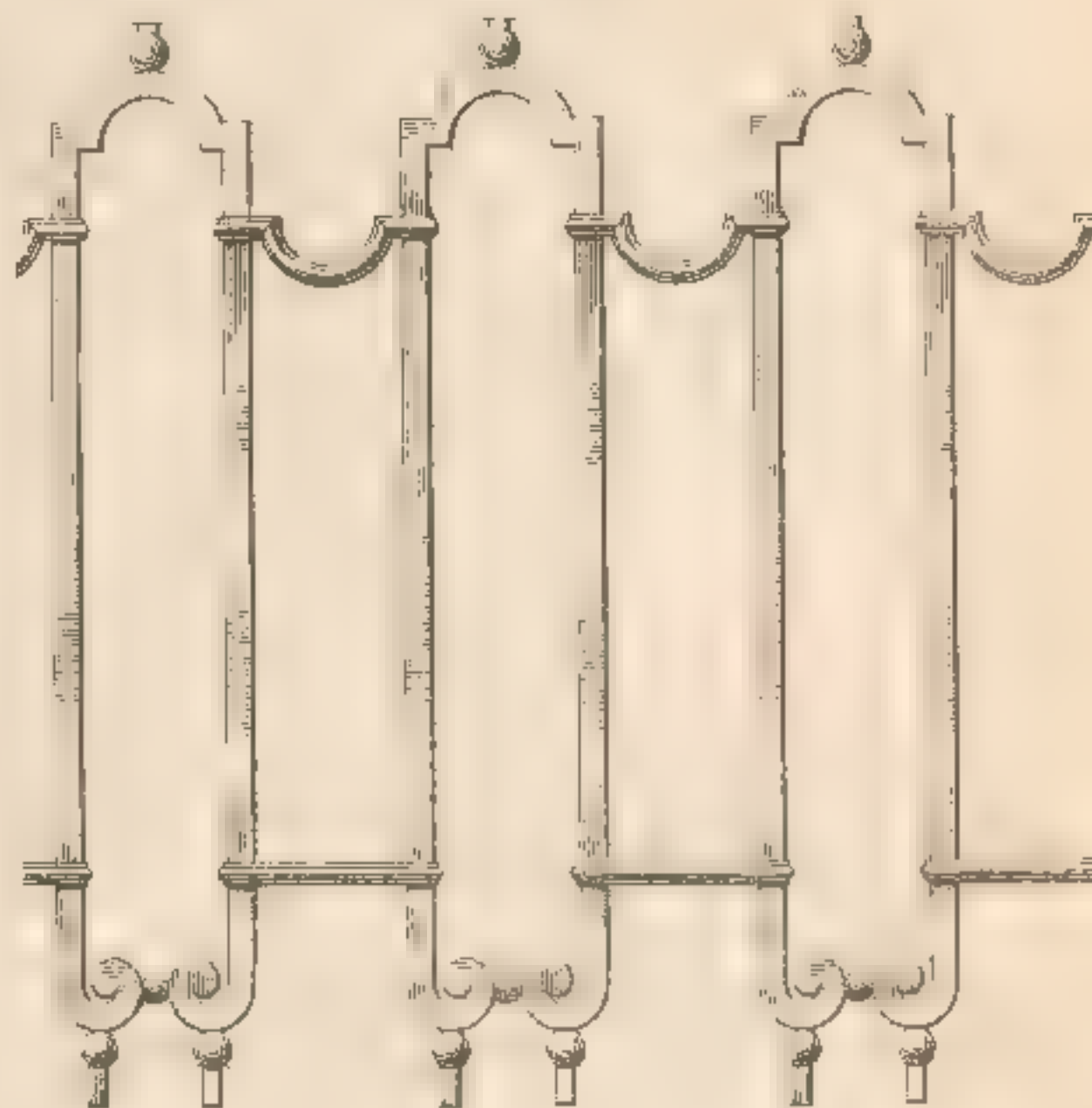
N^o 378



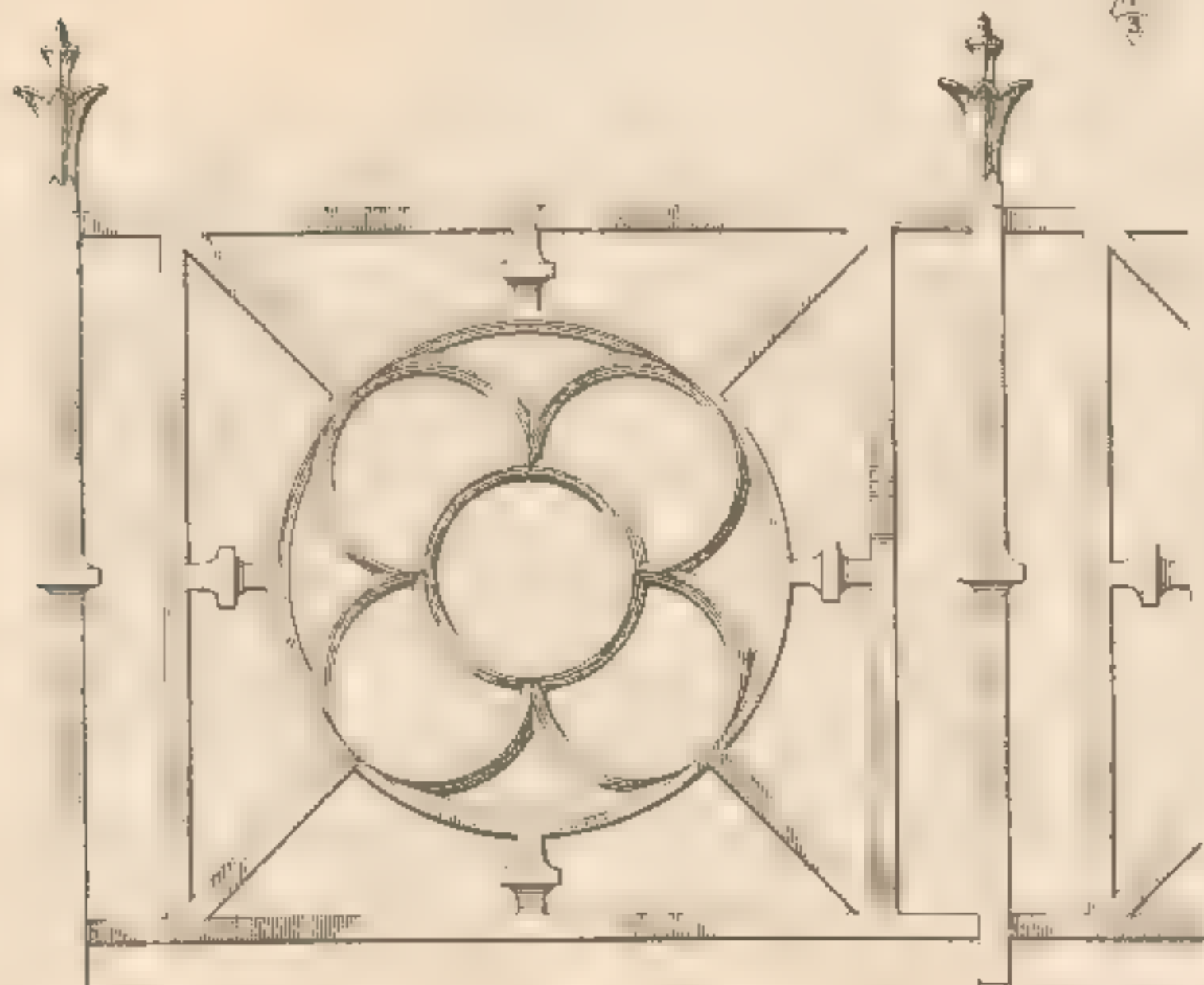
N^o 379



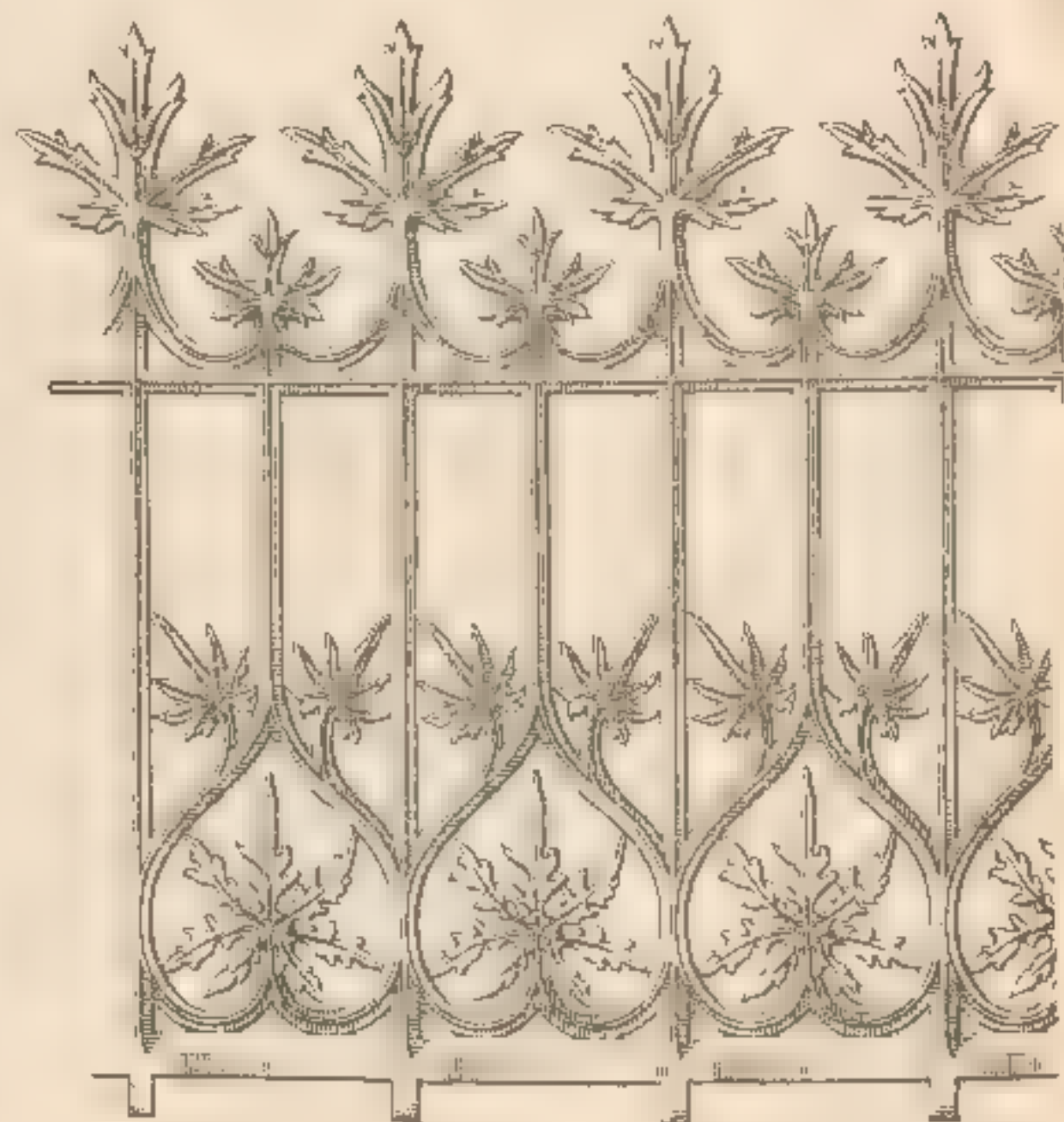
N^o 380



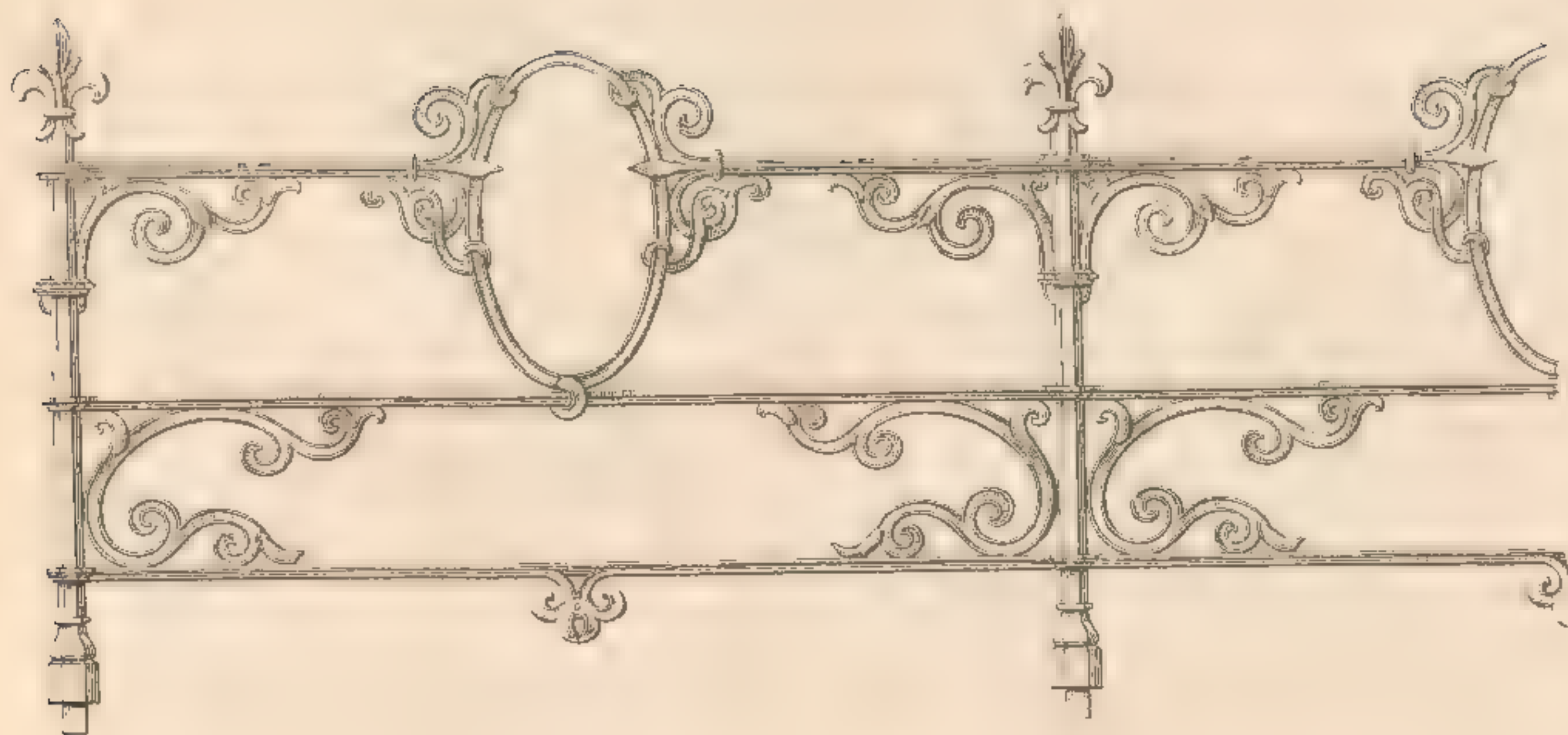
N^o 381



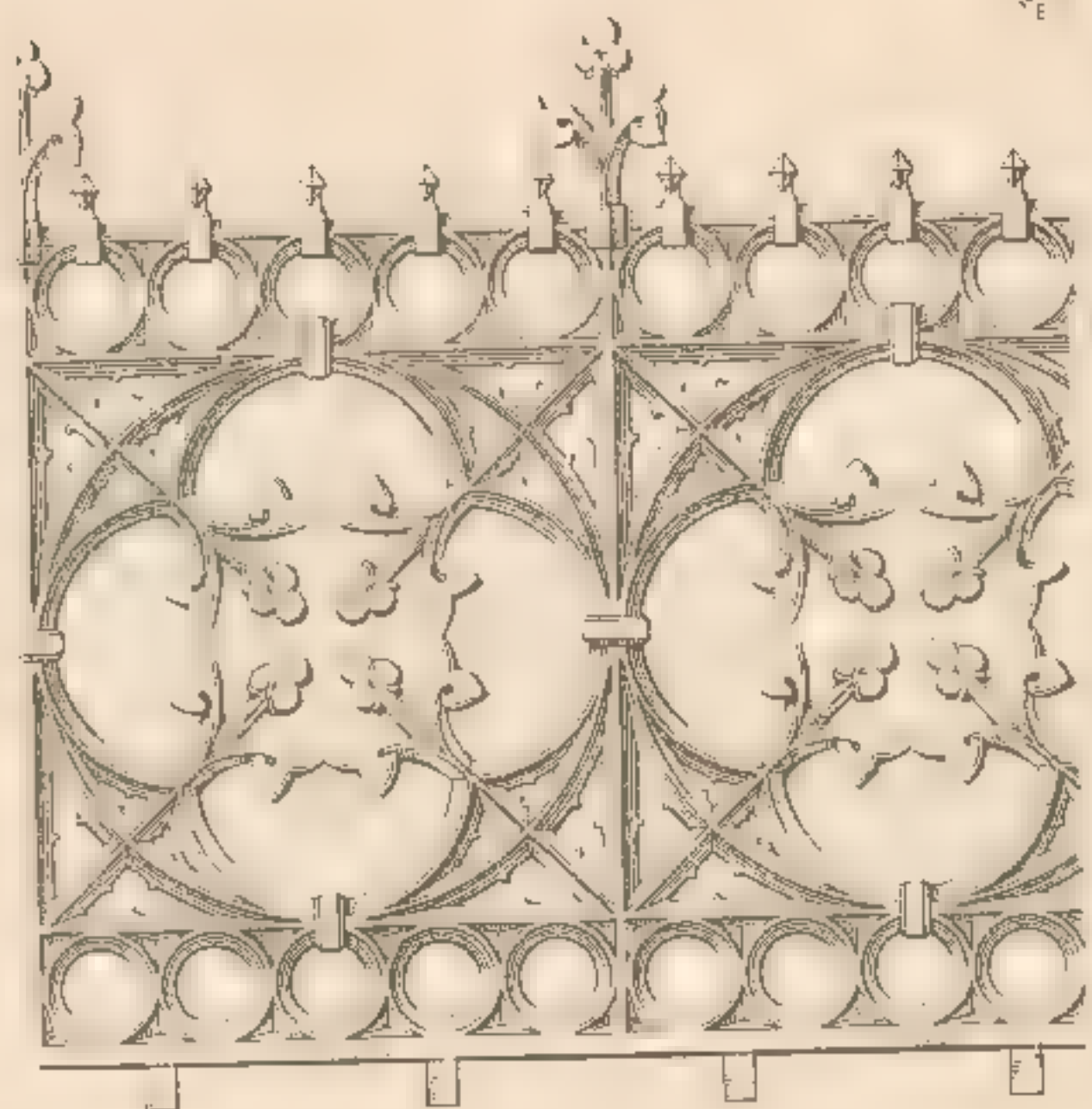
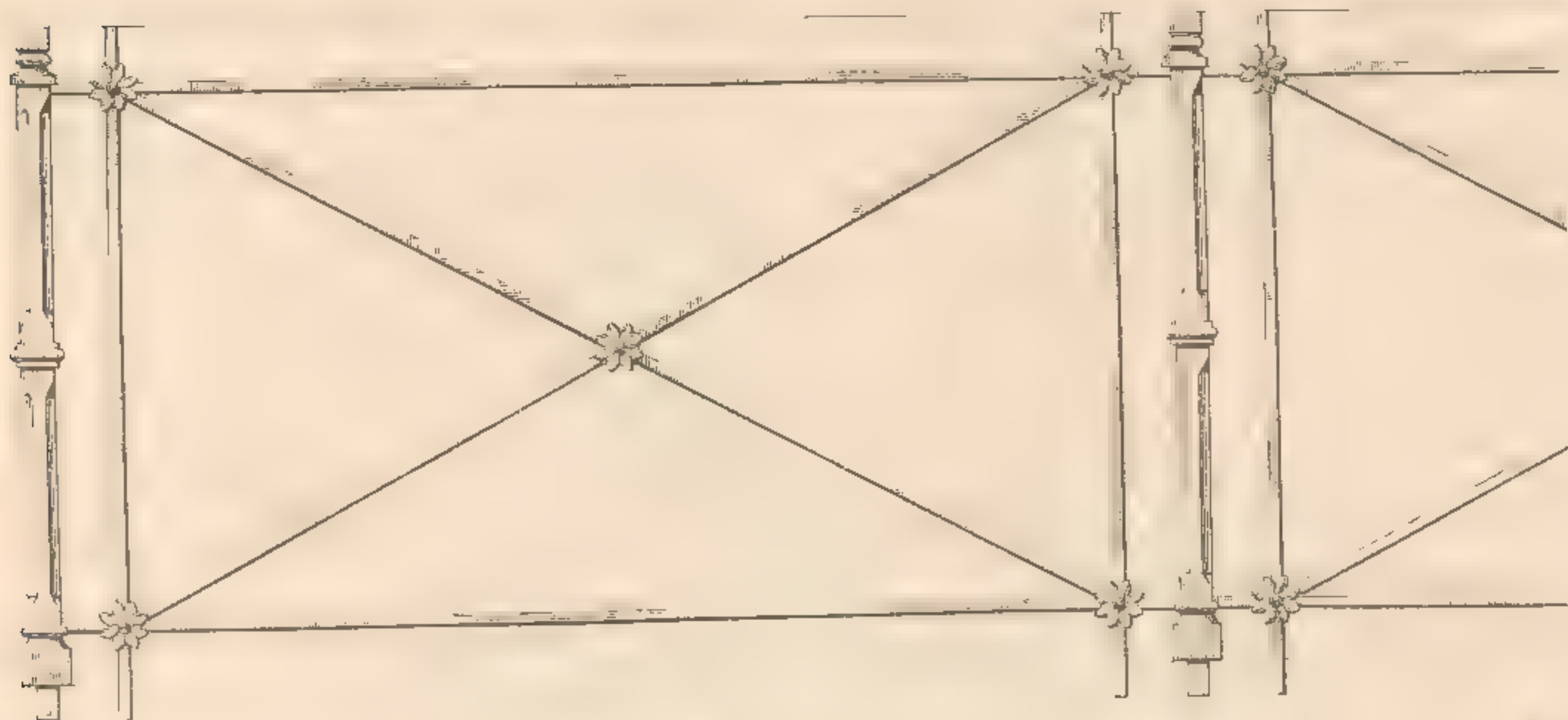
N^o 382



Nº 181



Nº 421



MACFARLANE'S RAILING & C

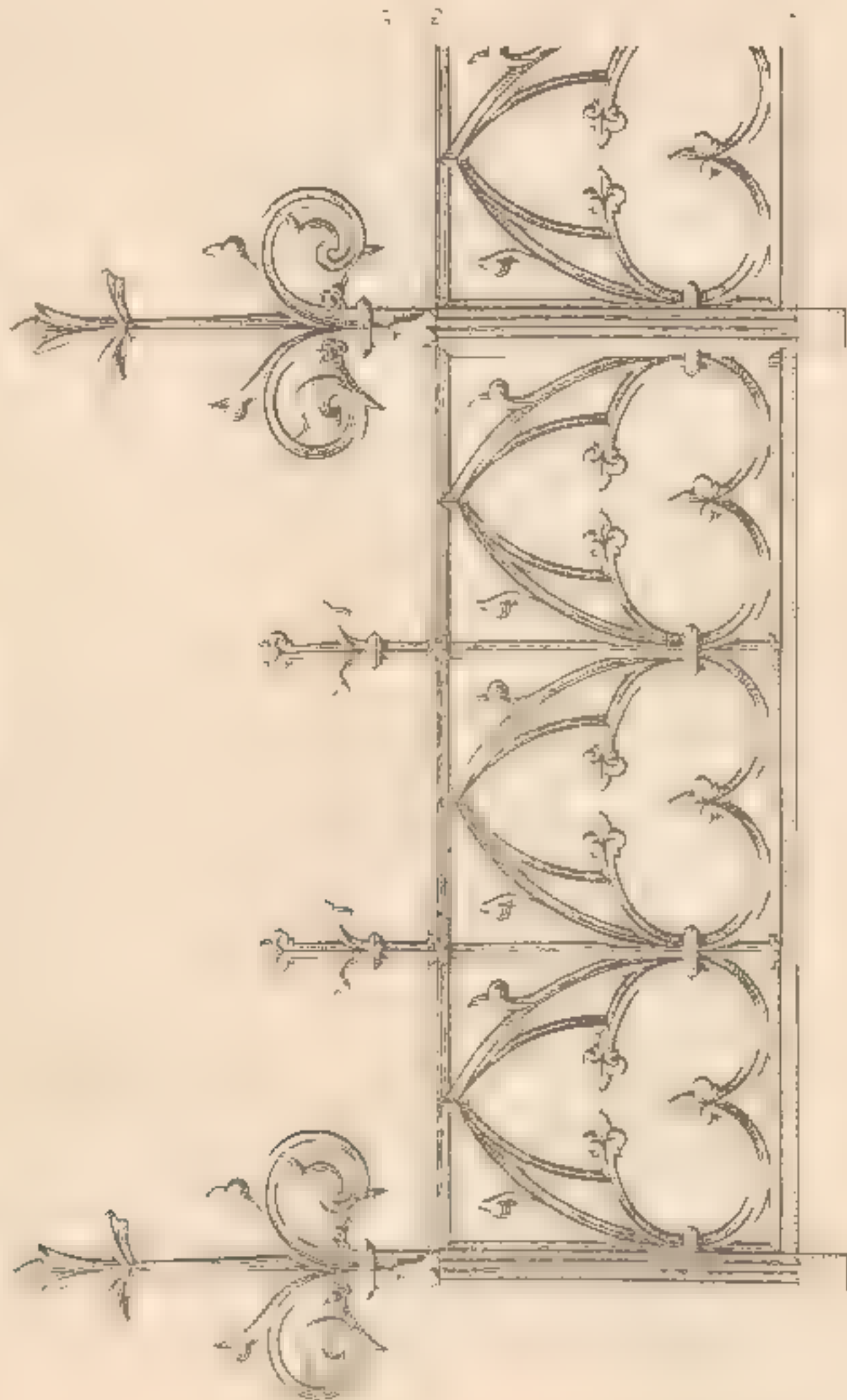
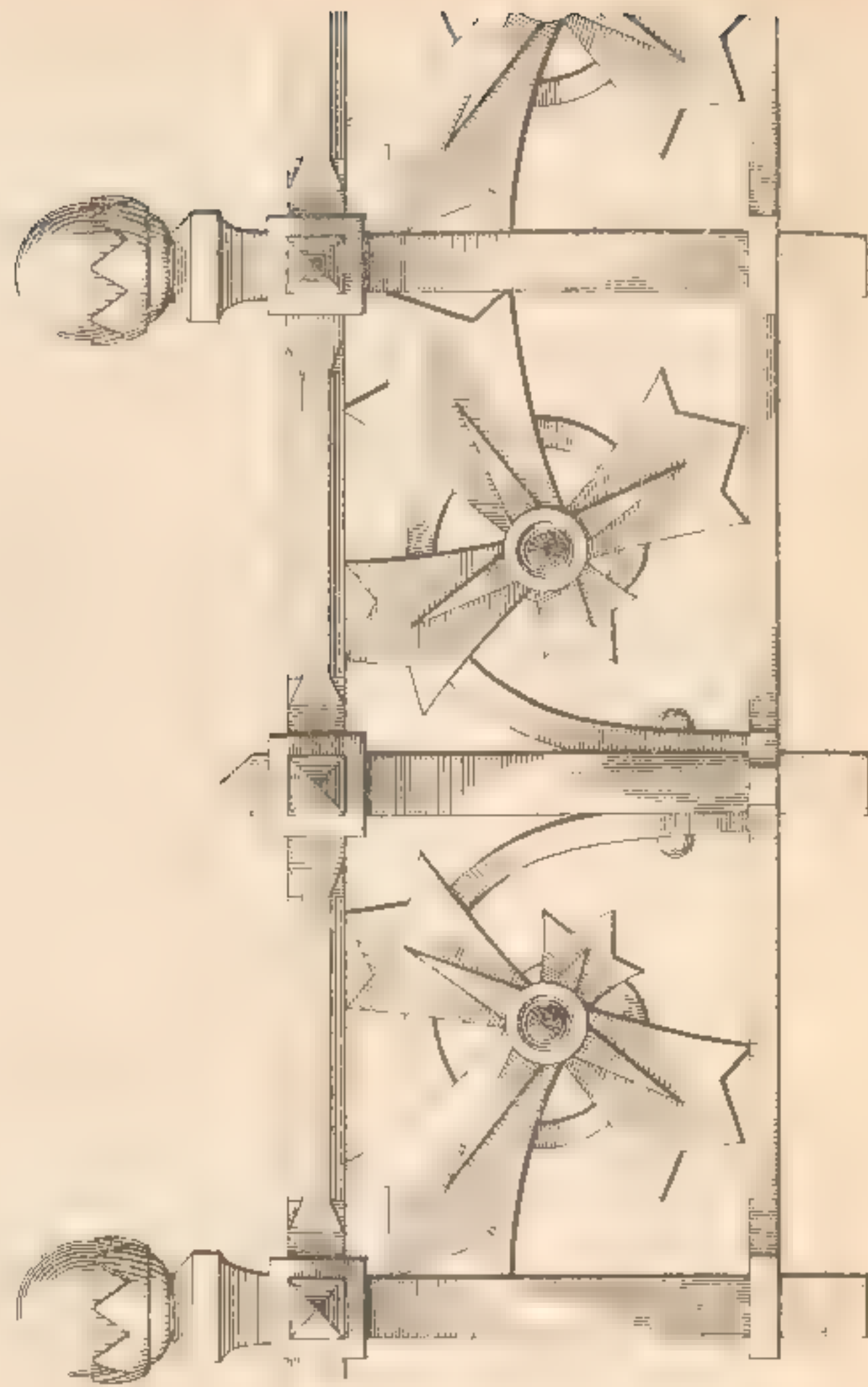
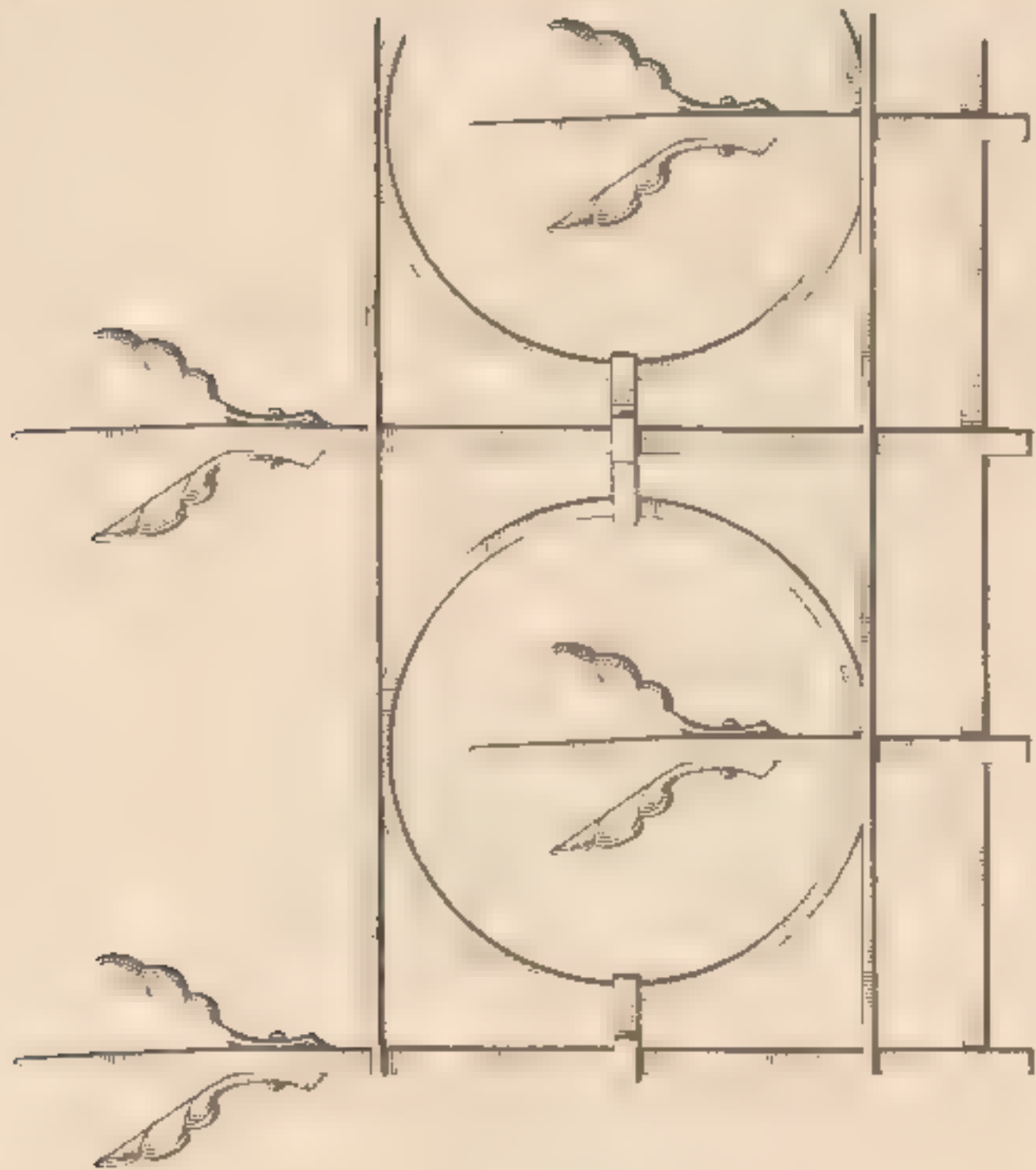


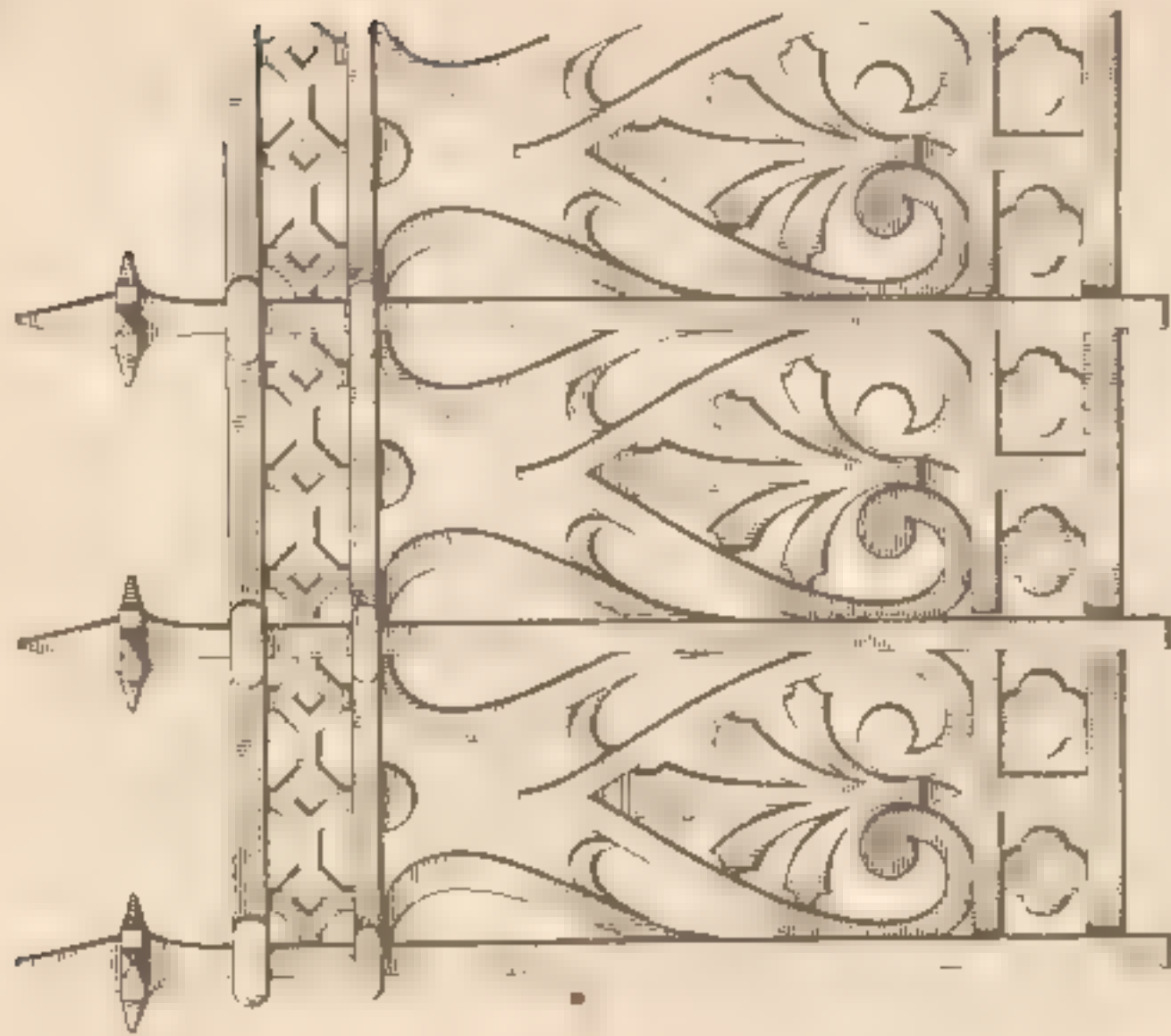
Fig. 452



1. 43



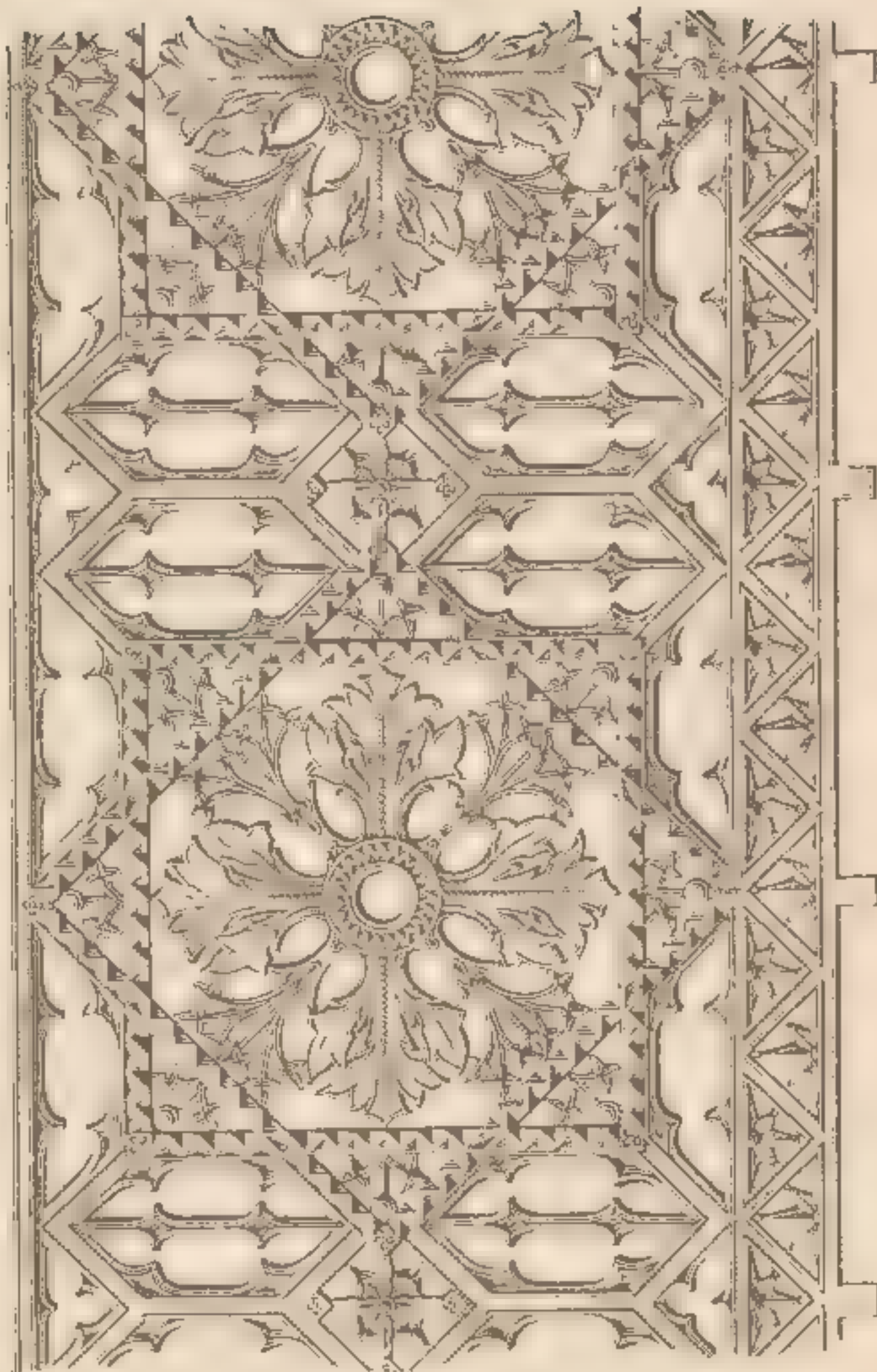
1. 84



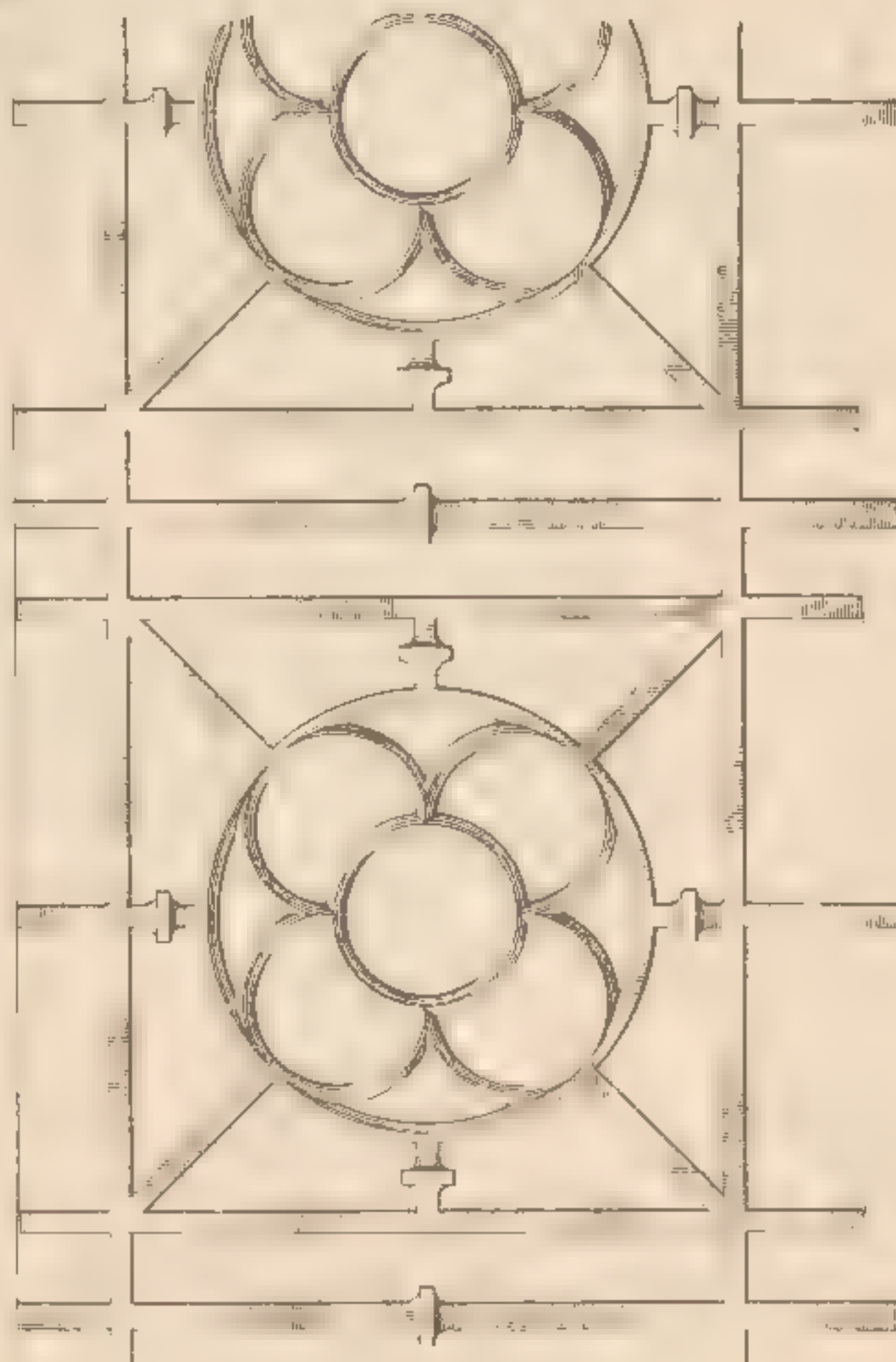
1. 5



1. 84

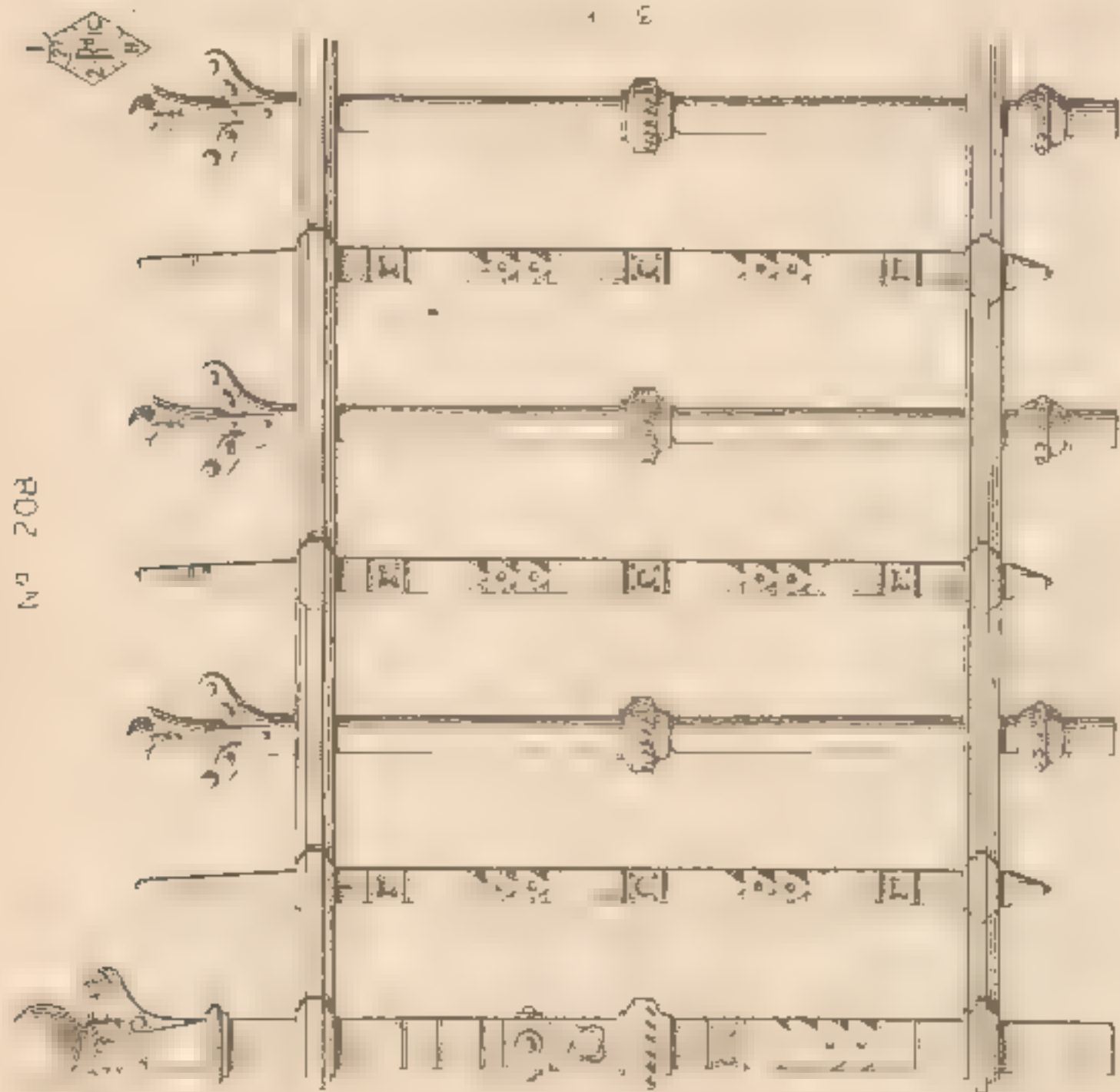


1. 59



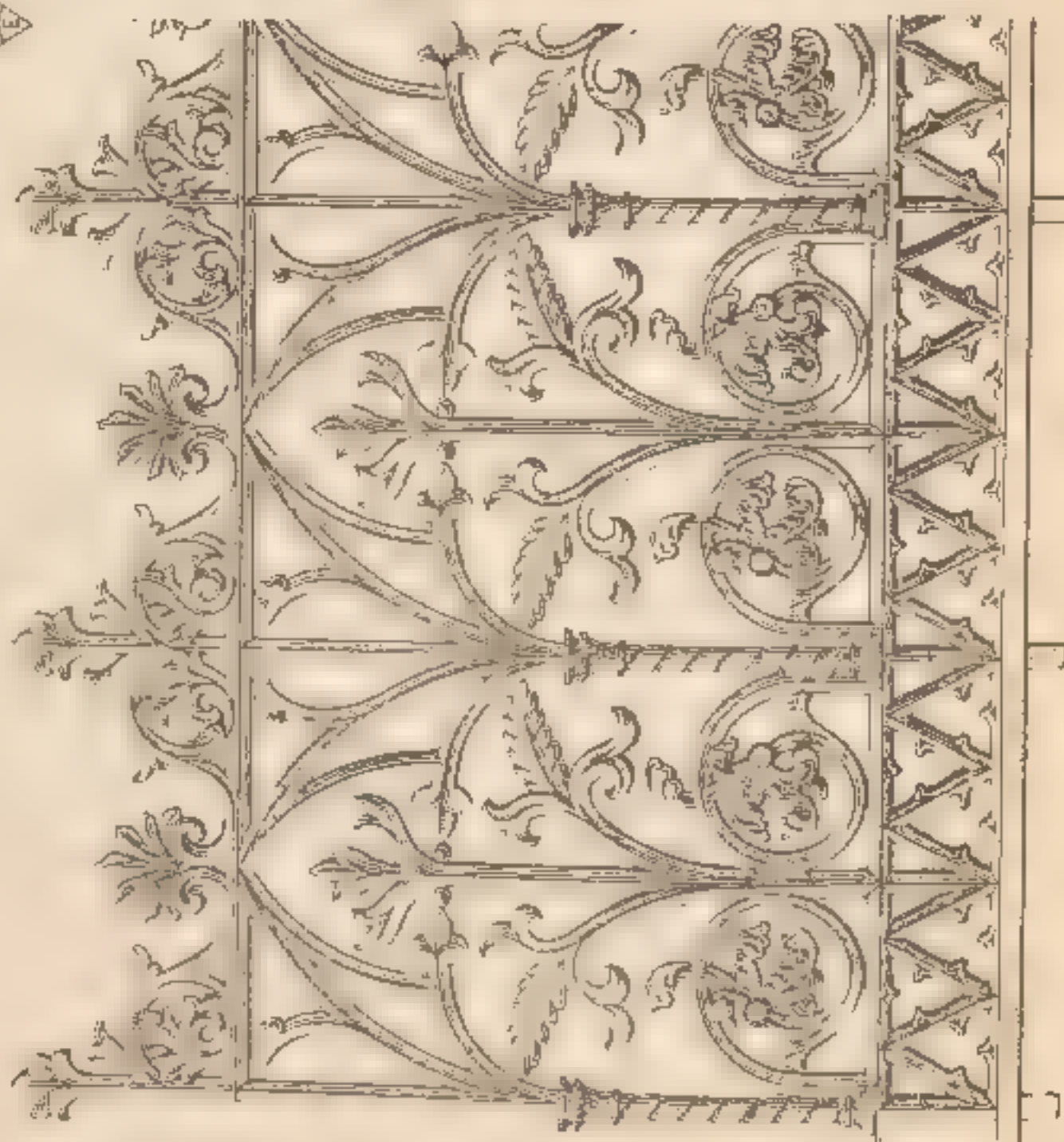
MACFARLANE'S RAILING & C

N^o 208

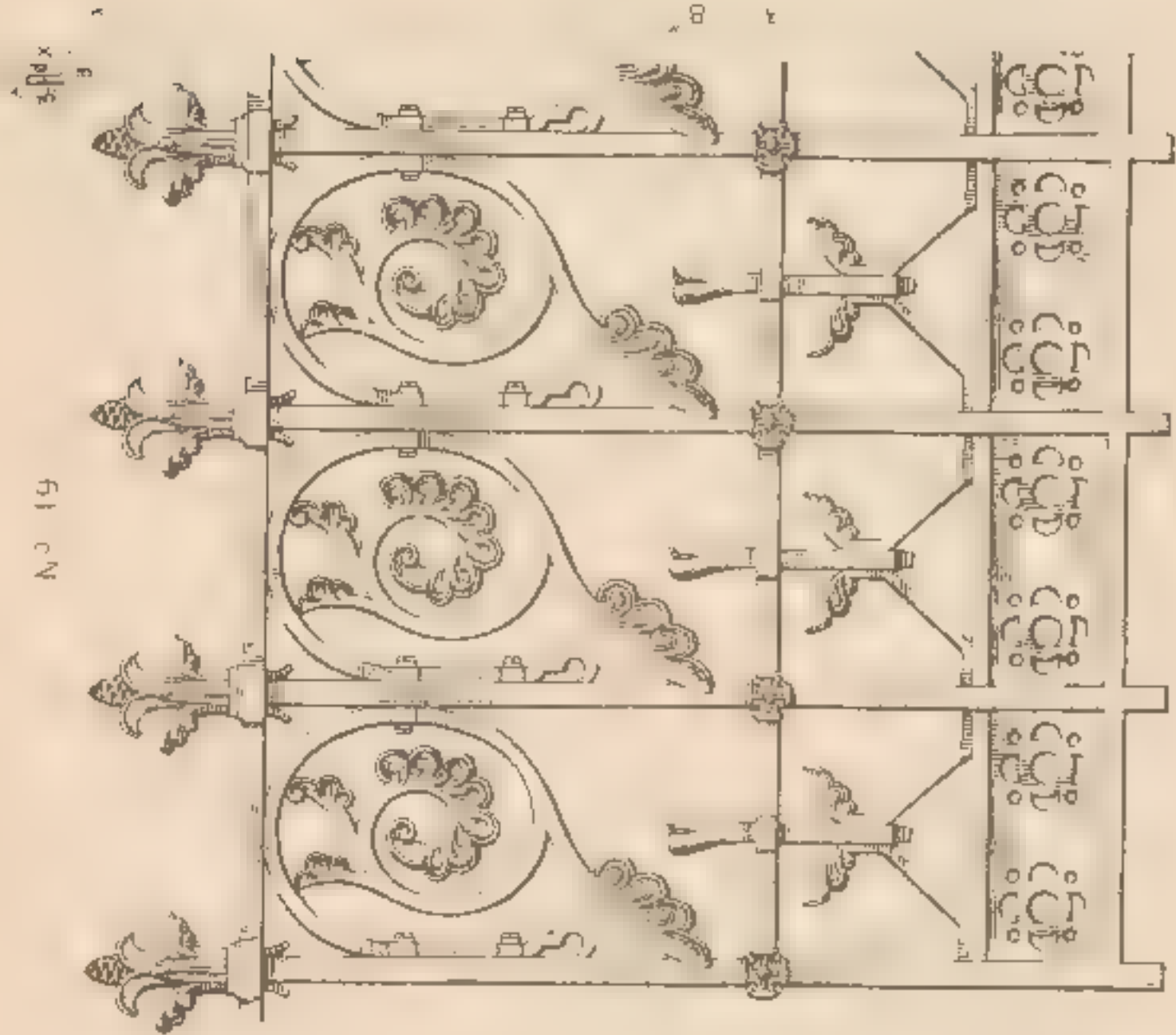


Standards charged extra.

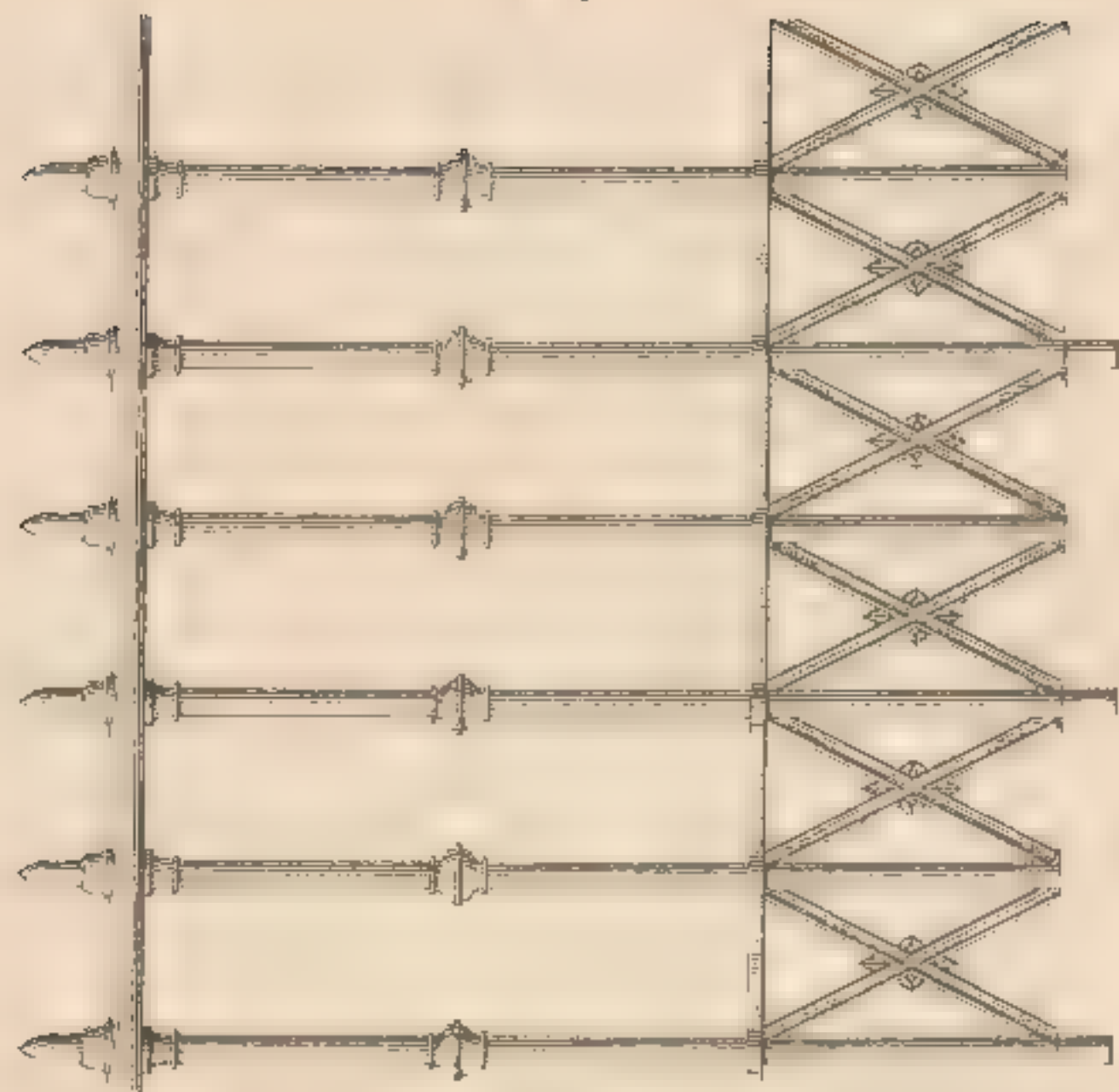
N^o 83



N^o 19



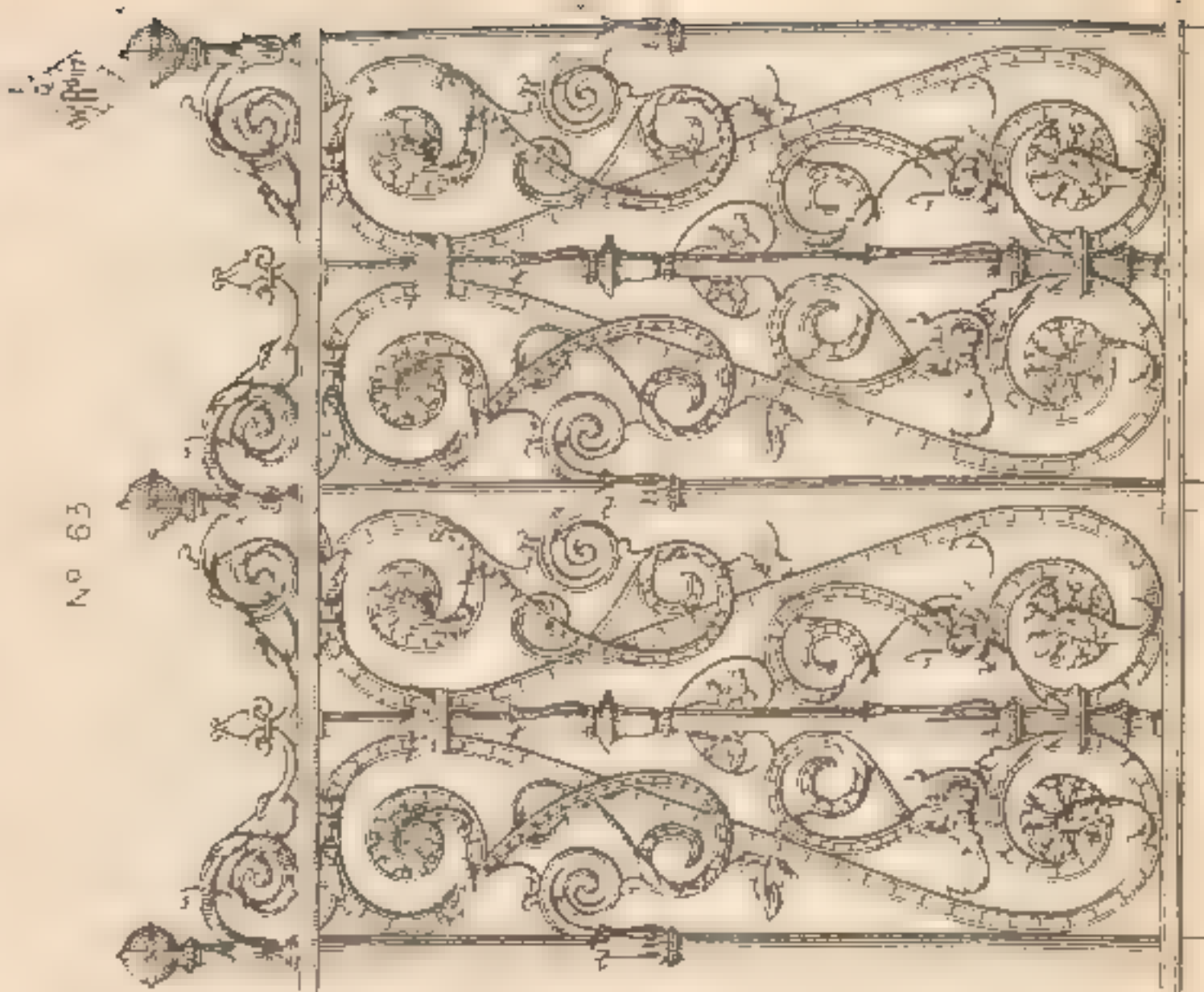
N^o 233

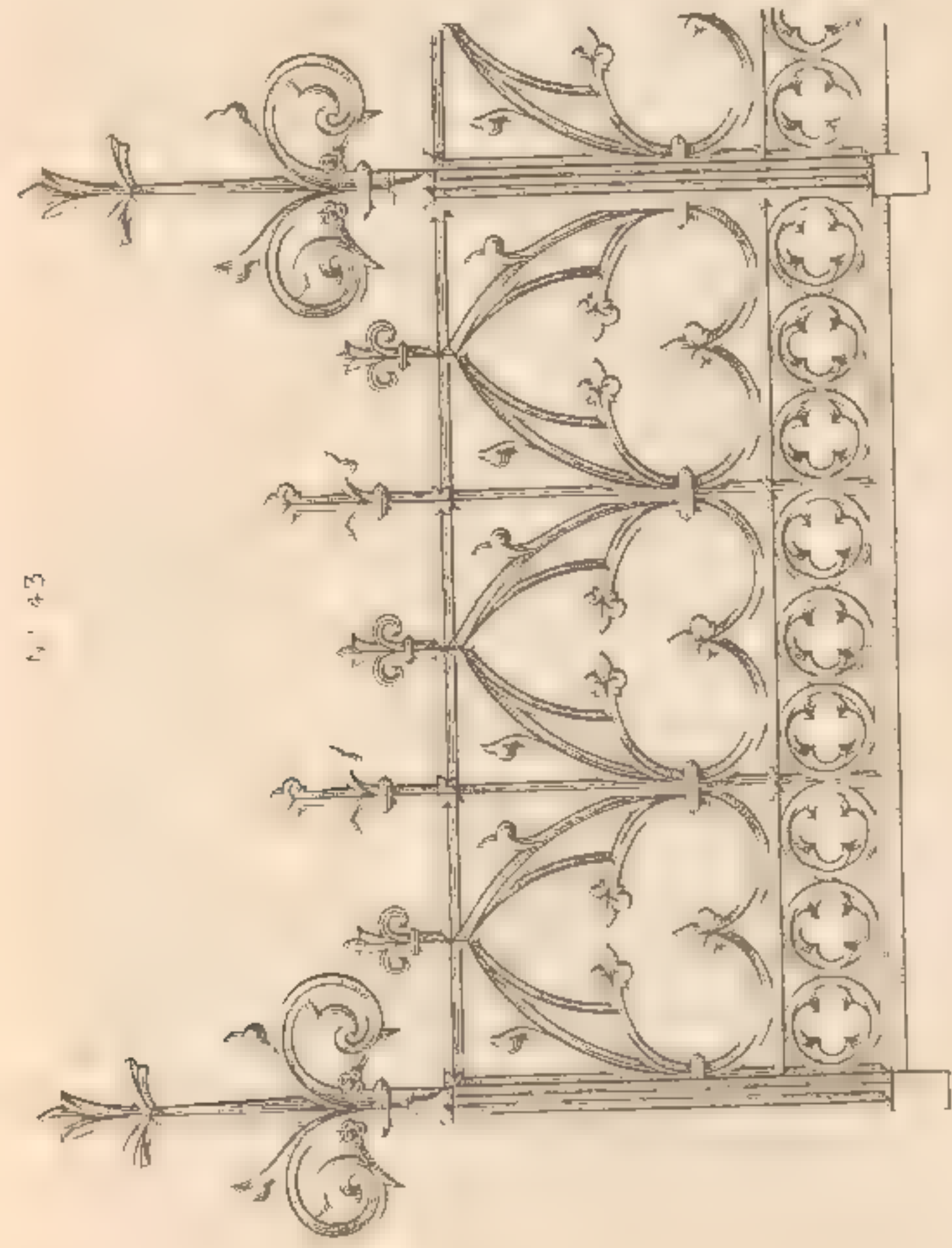


N^o 207

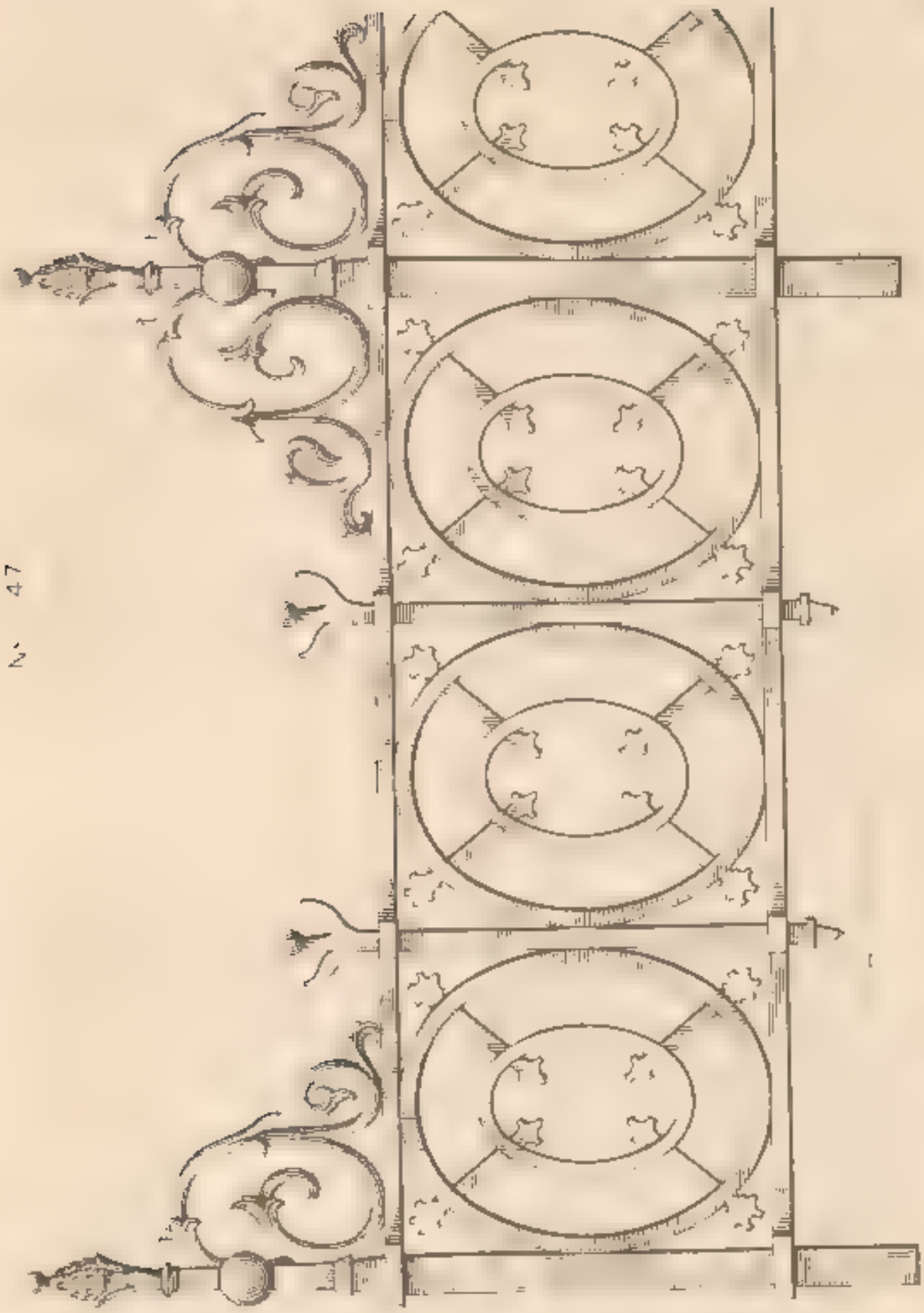


N^o 63

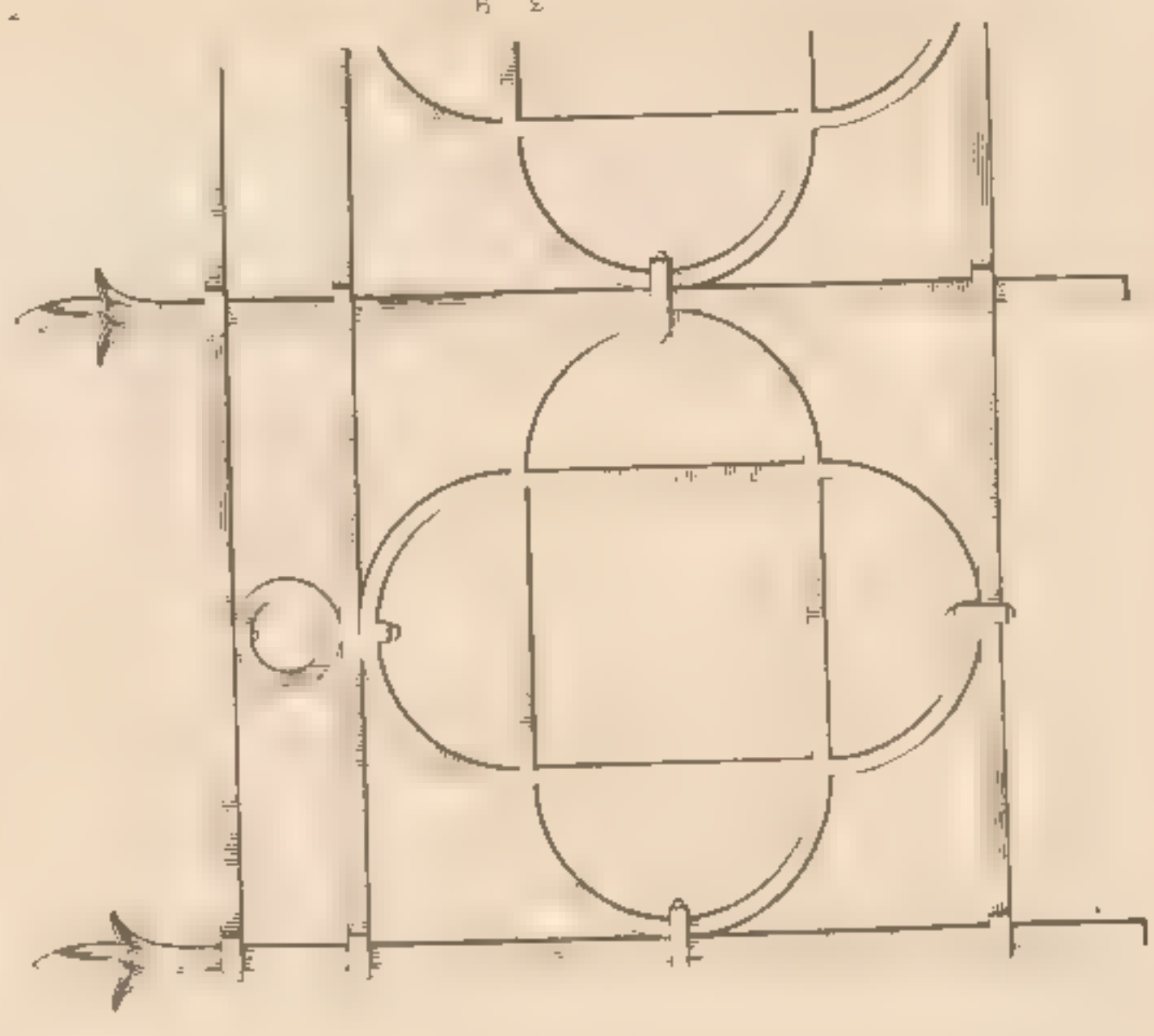




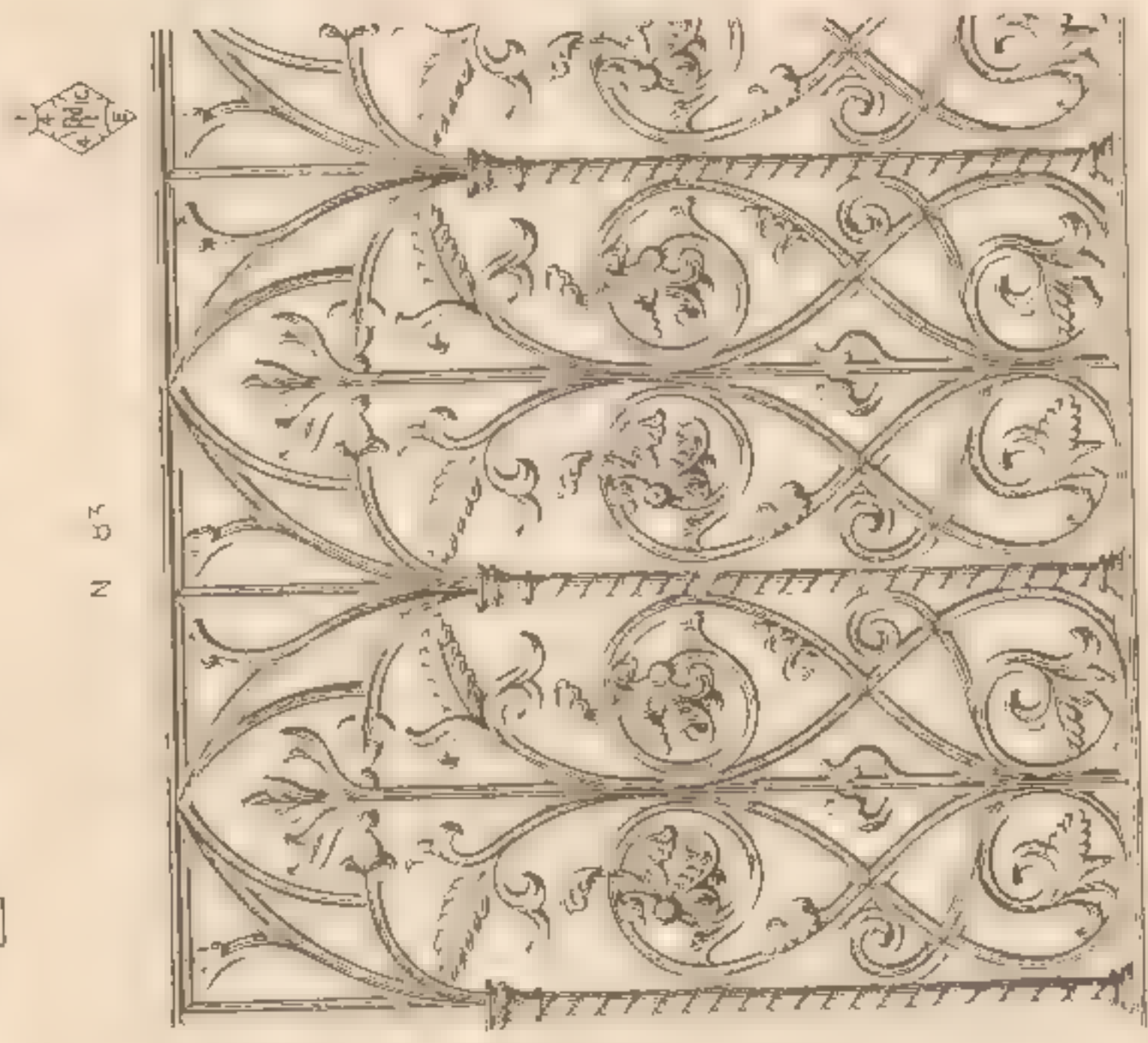
No. 47



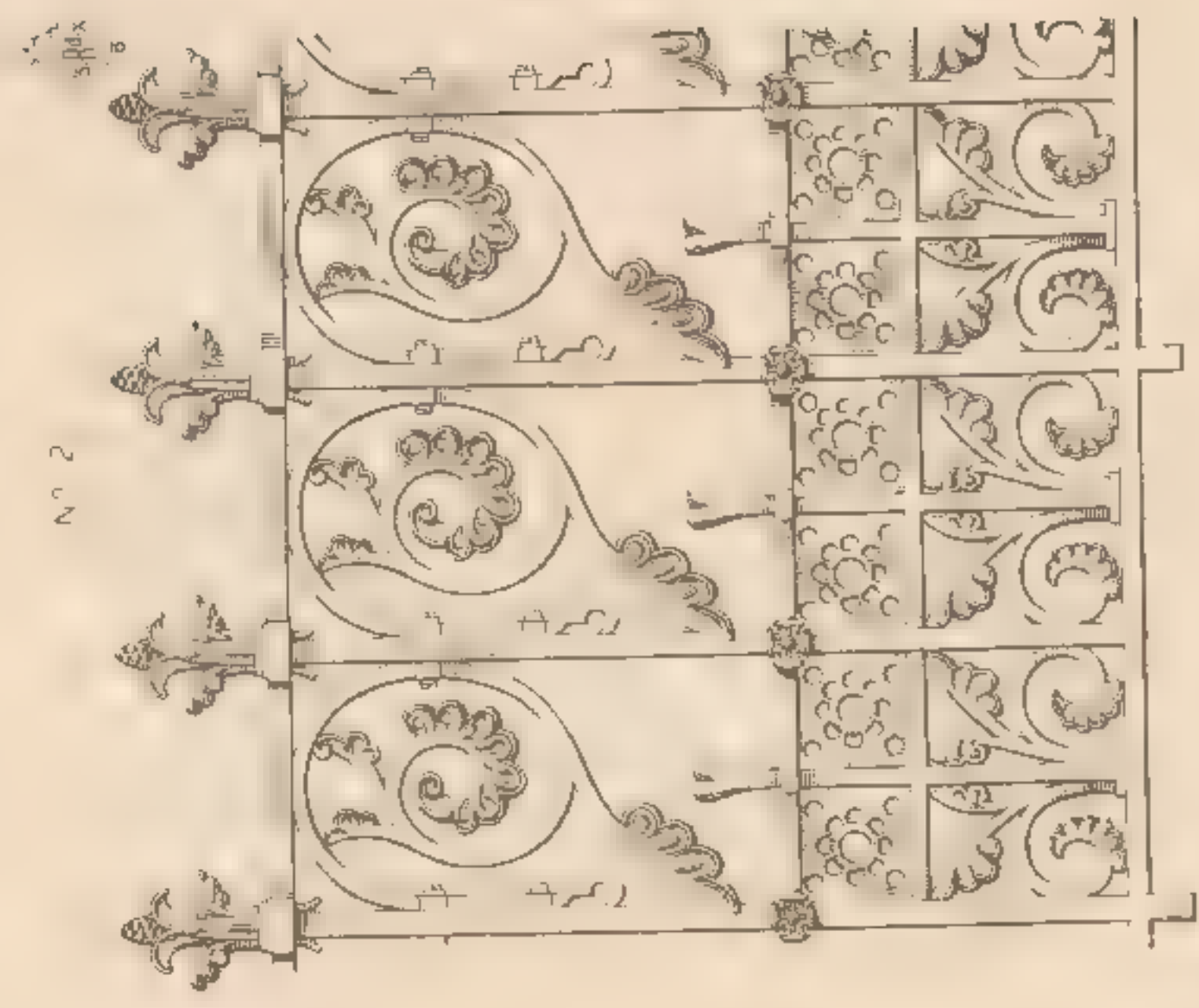
No. 25



No. 23

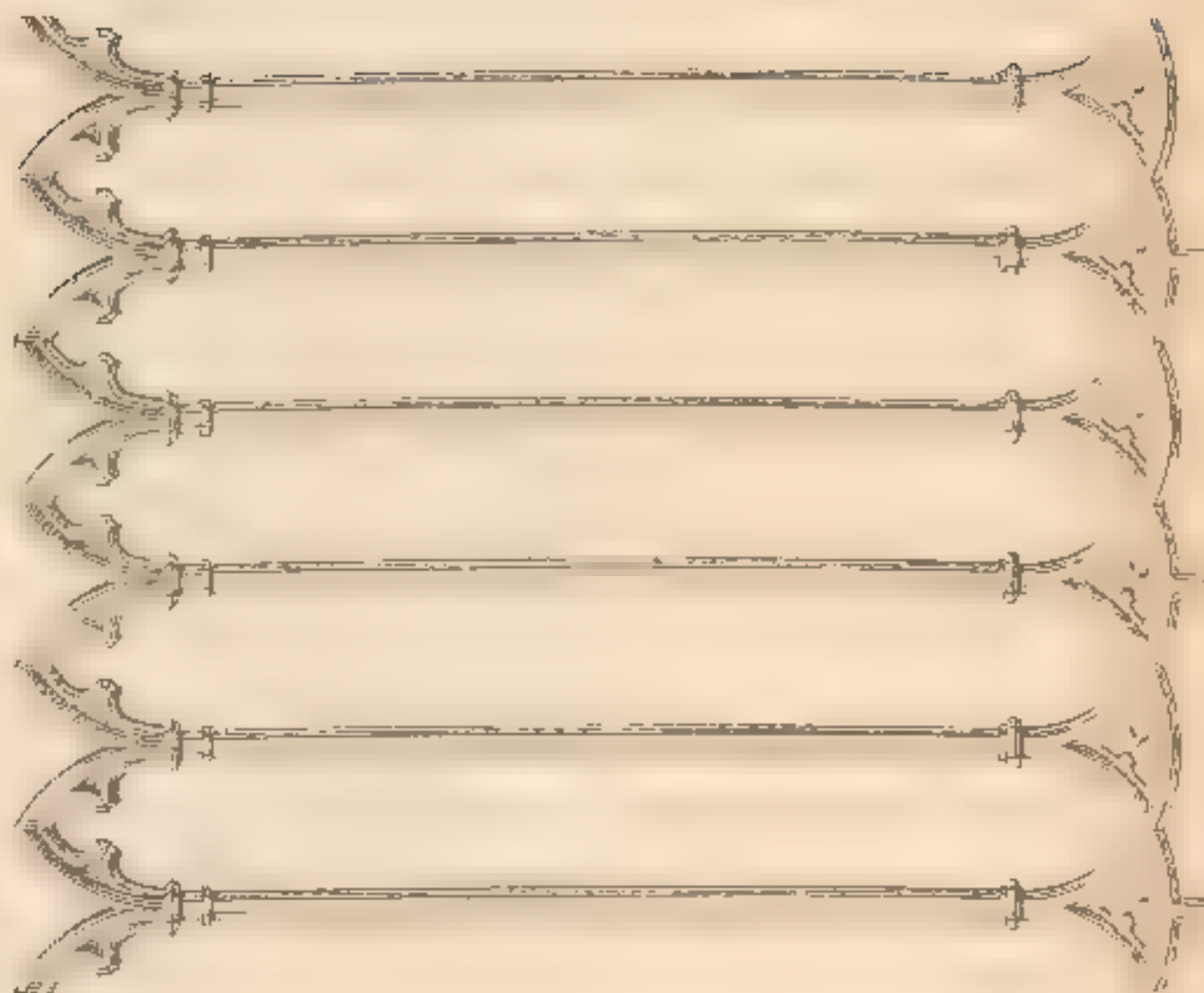
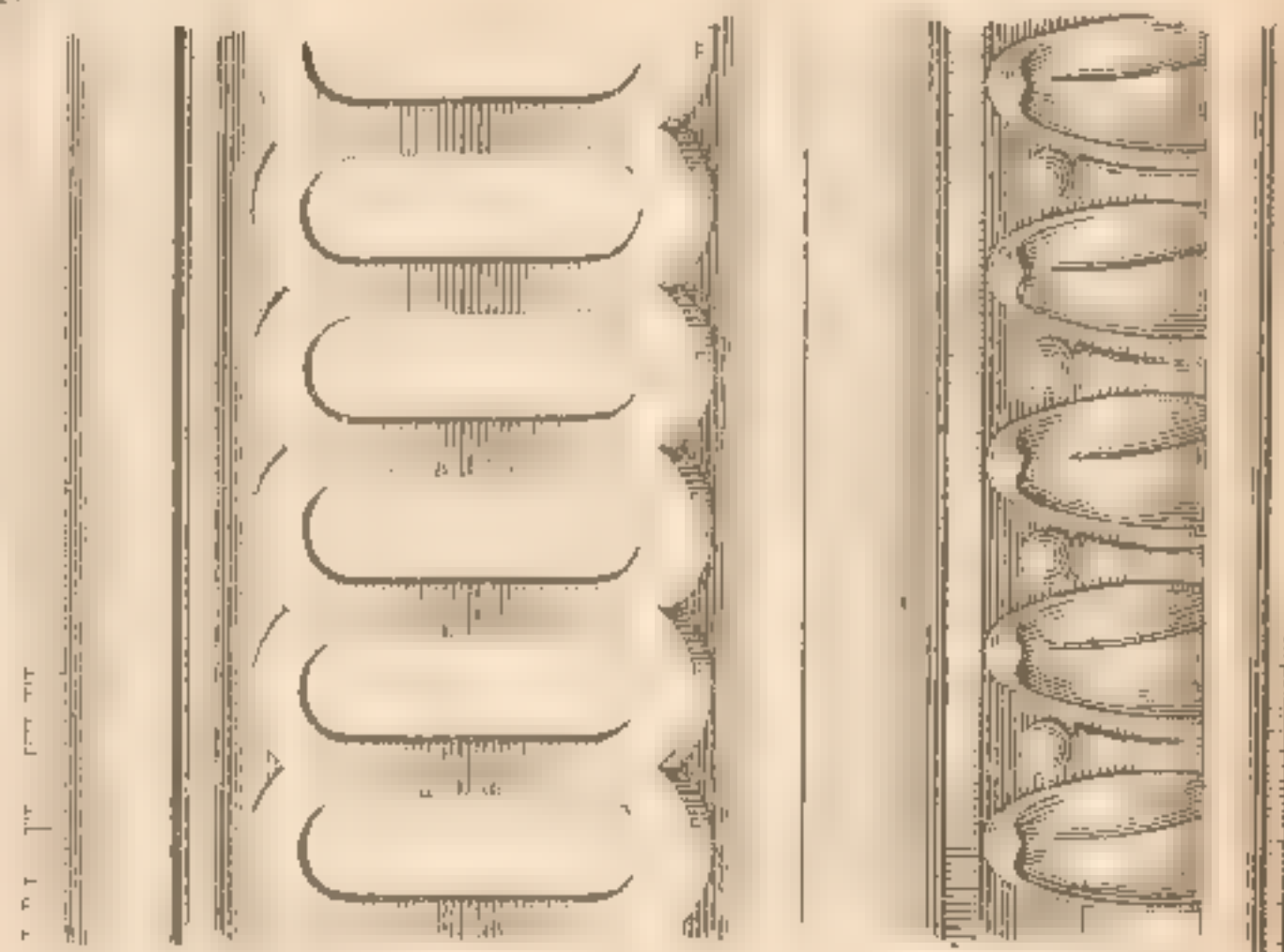
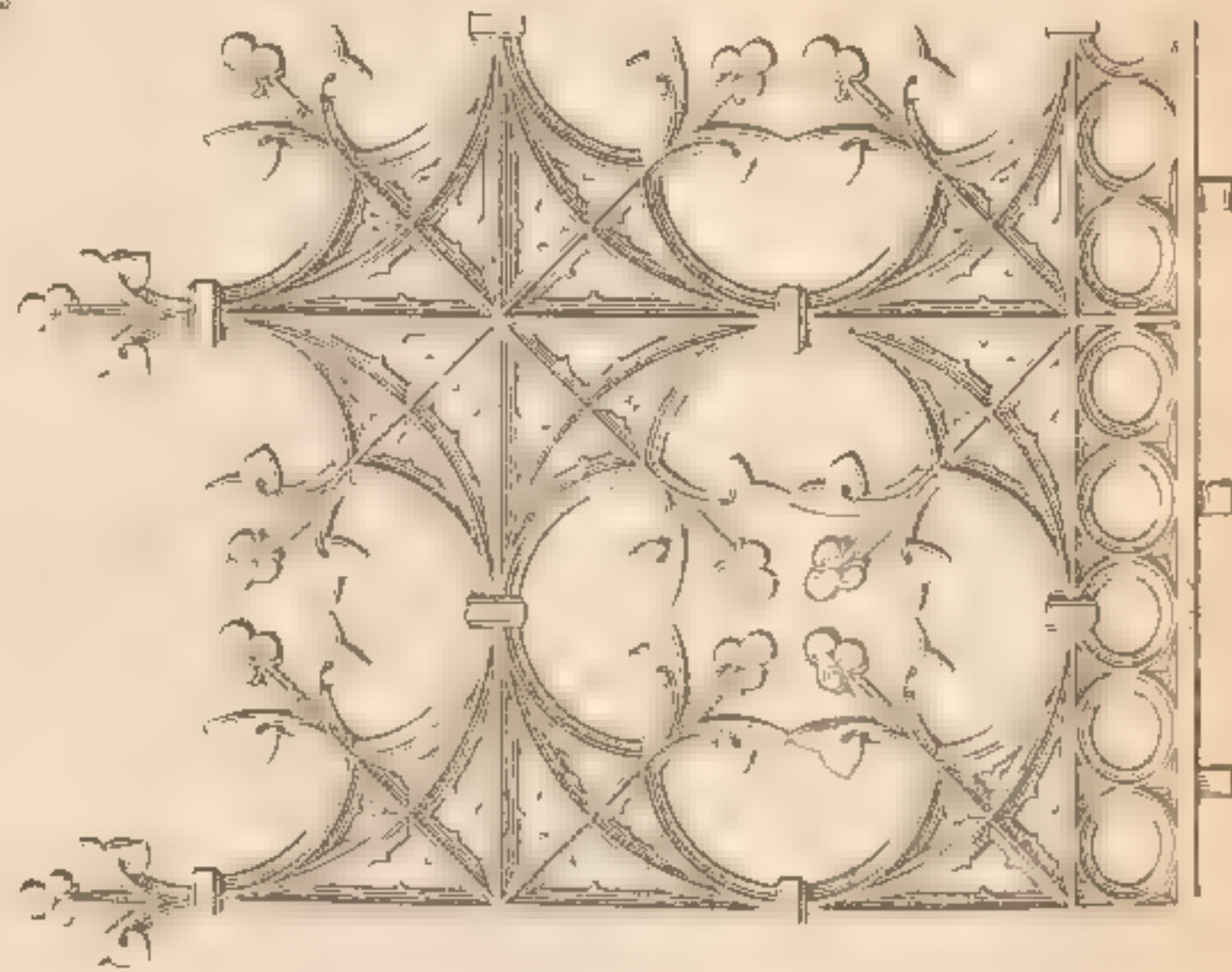


No. 2



SCALE 1 INCH = 1 FOOT

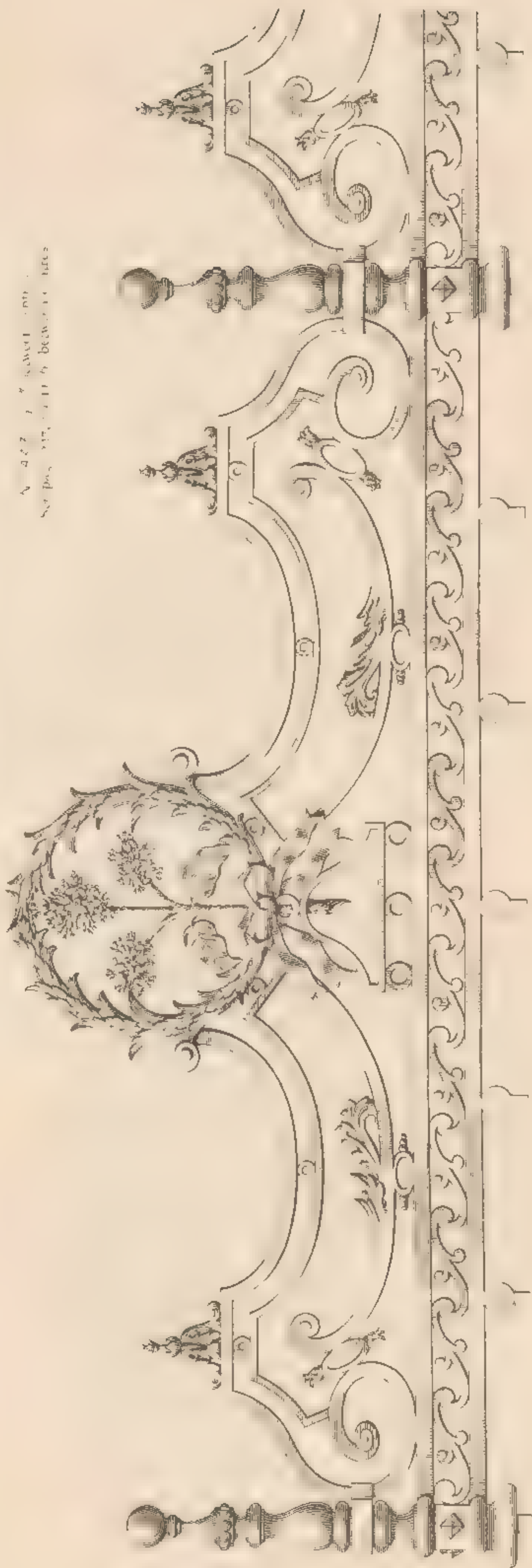
MACFARLANE'S RAILING & C



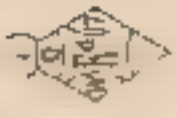


Manoir de la Chapelle de la Madeleine, 1823

Manoir de la Chapelle de la Madeleine, 1823

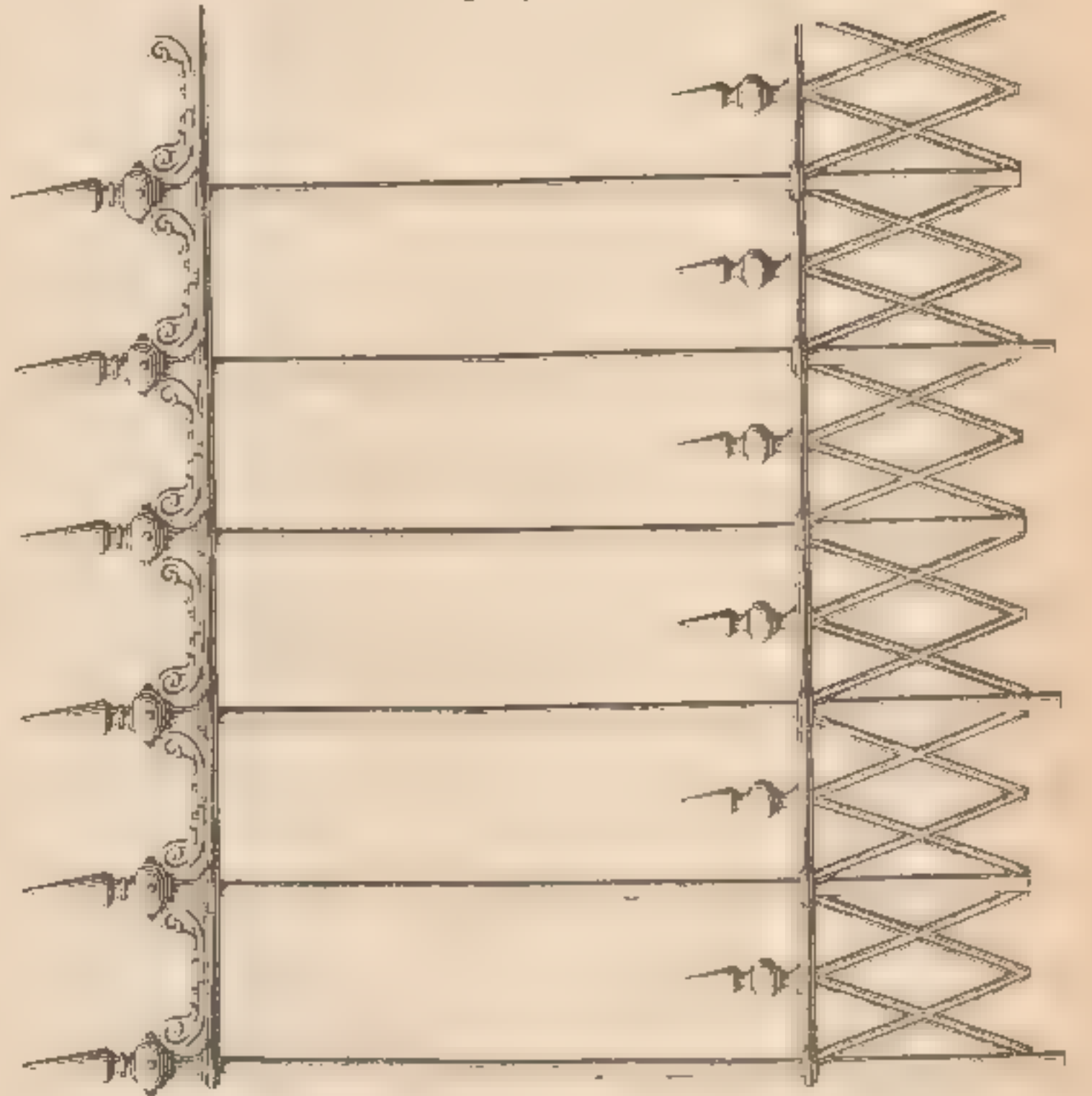


N° 49



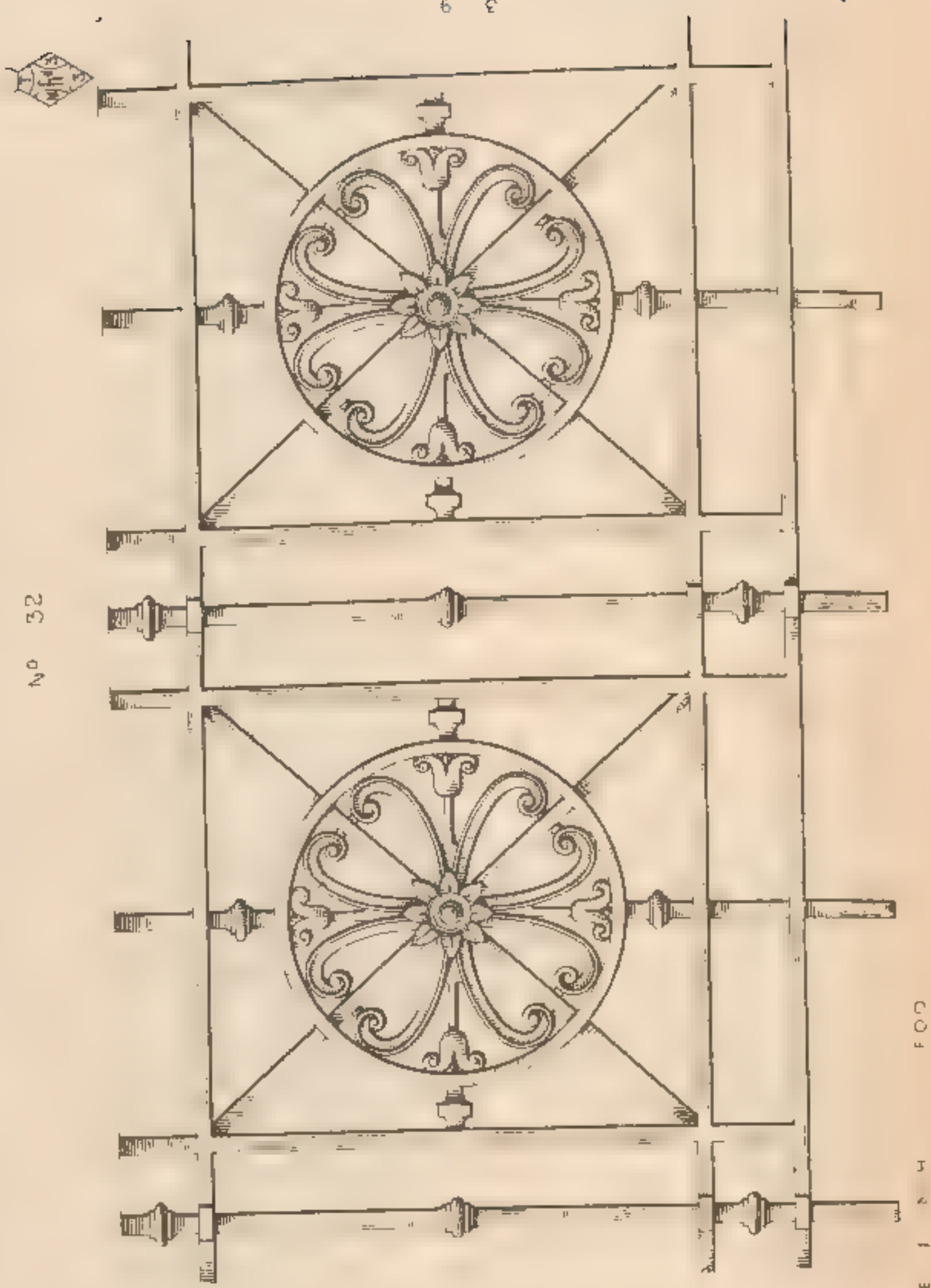
Main Circle repeats every 12' 3" See No. 243 Terminal Example, Page 139

N° 464



4 0

N° 32

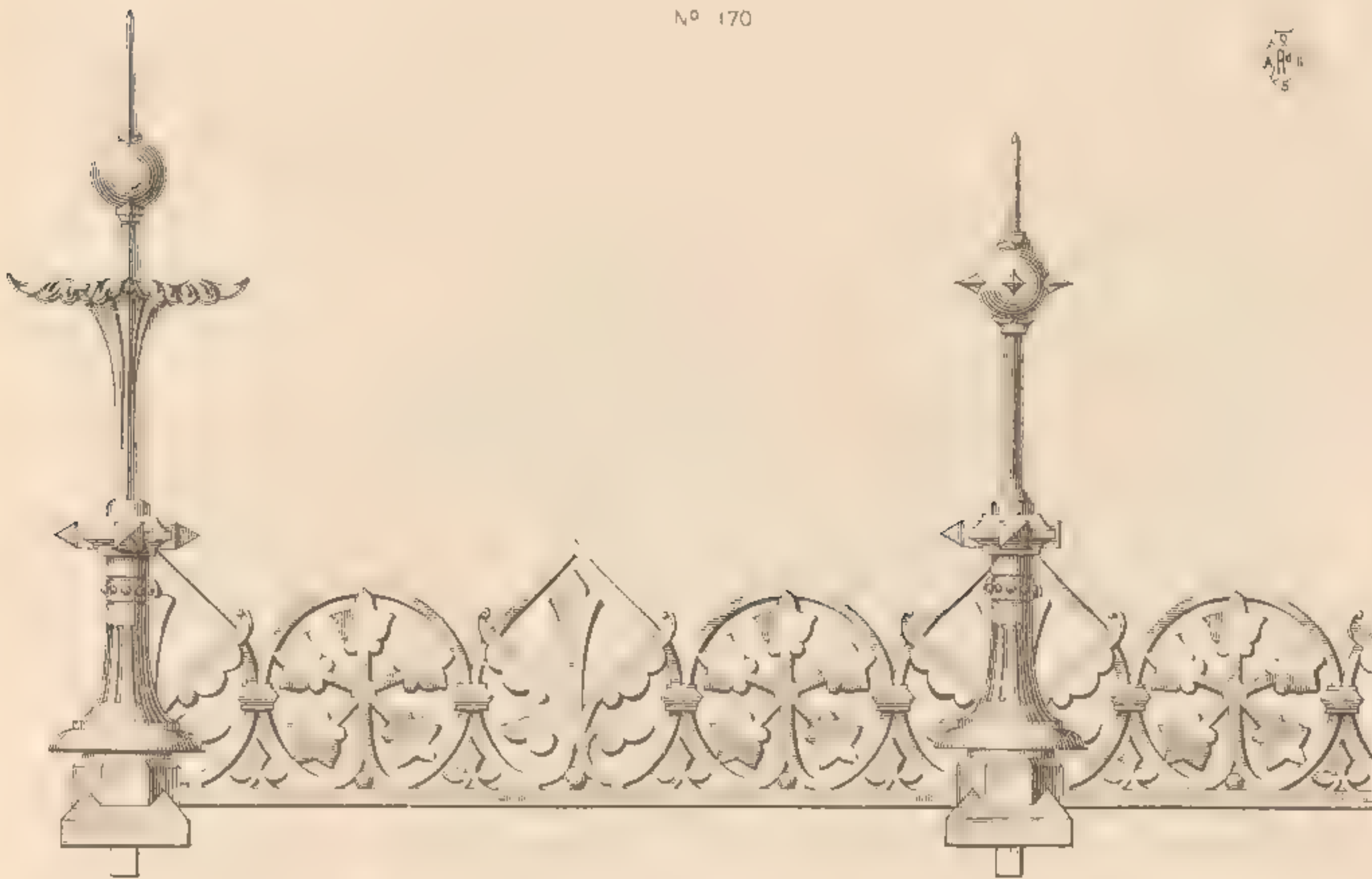


A E I N W F O O

MACFARLANE'S RAILING & CO

No 170

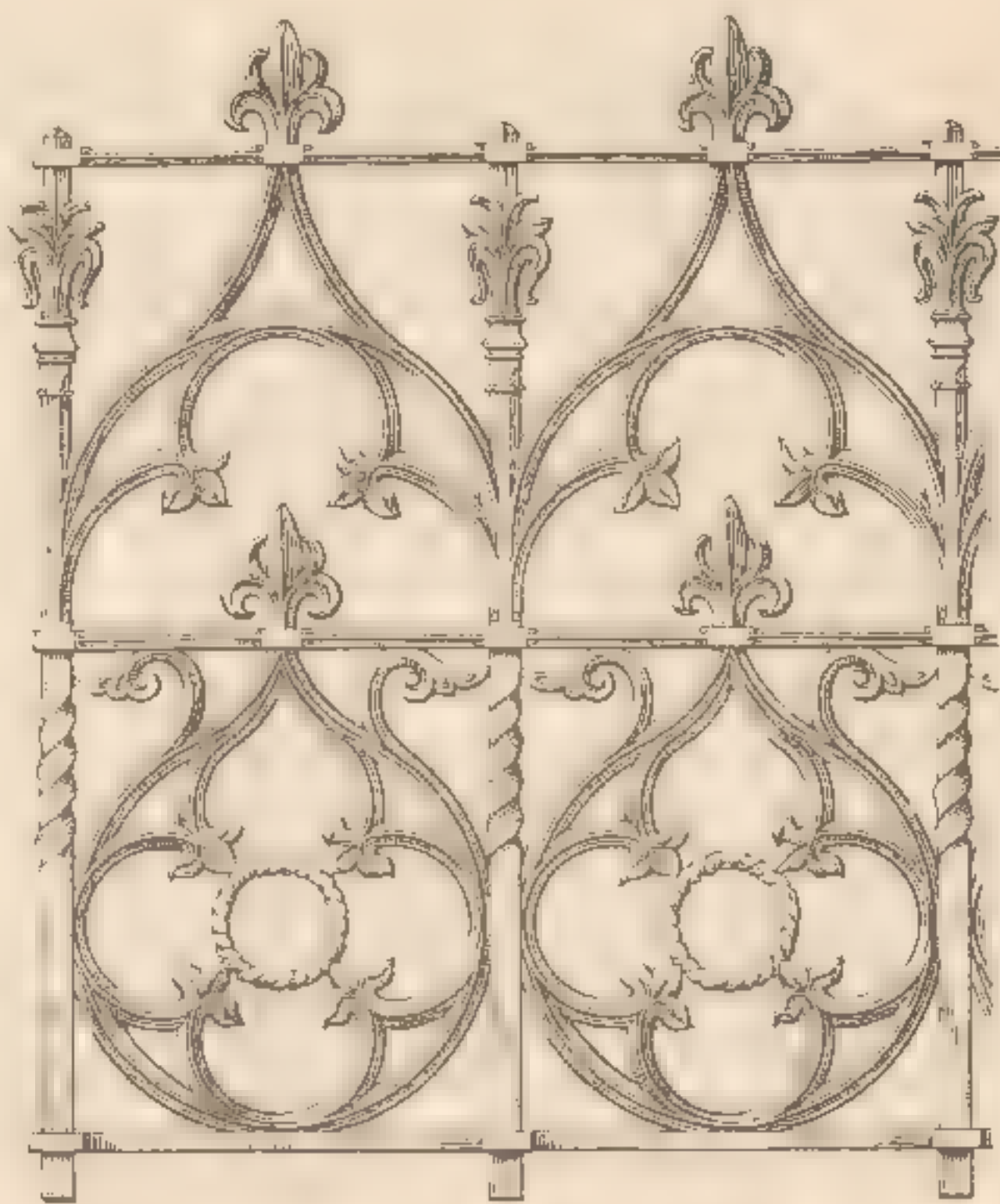
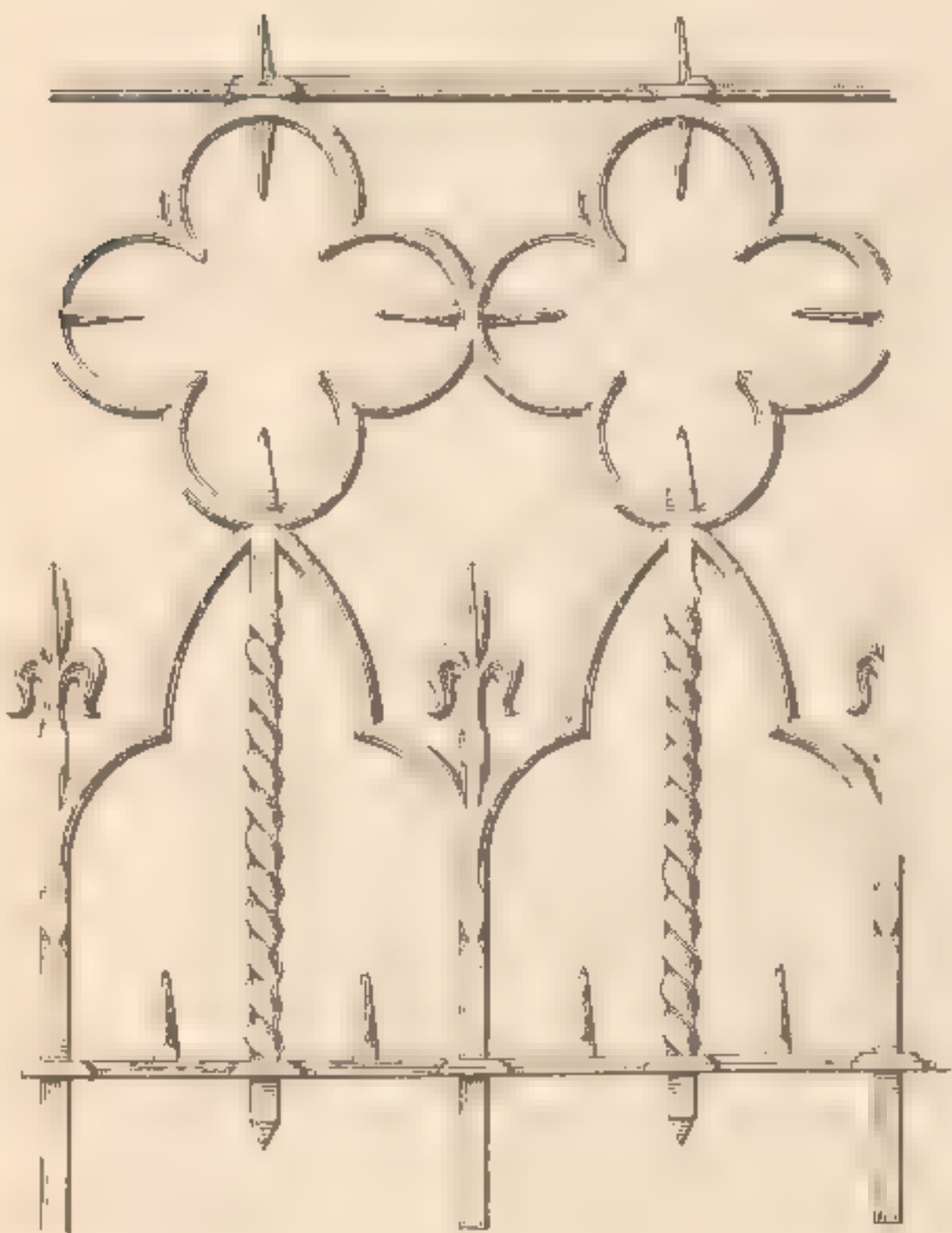
10
11
12
13
14
15



No. 18 Terminal 14' 0" repeats every 5' 2 1/2" No 108 4' 10" c. 1. and 1 at corners to end

No 275

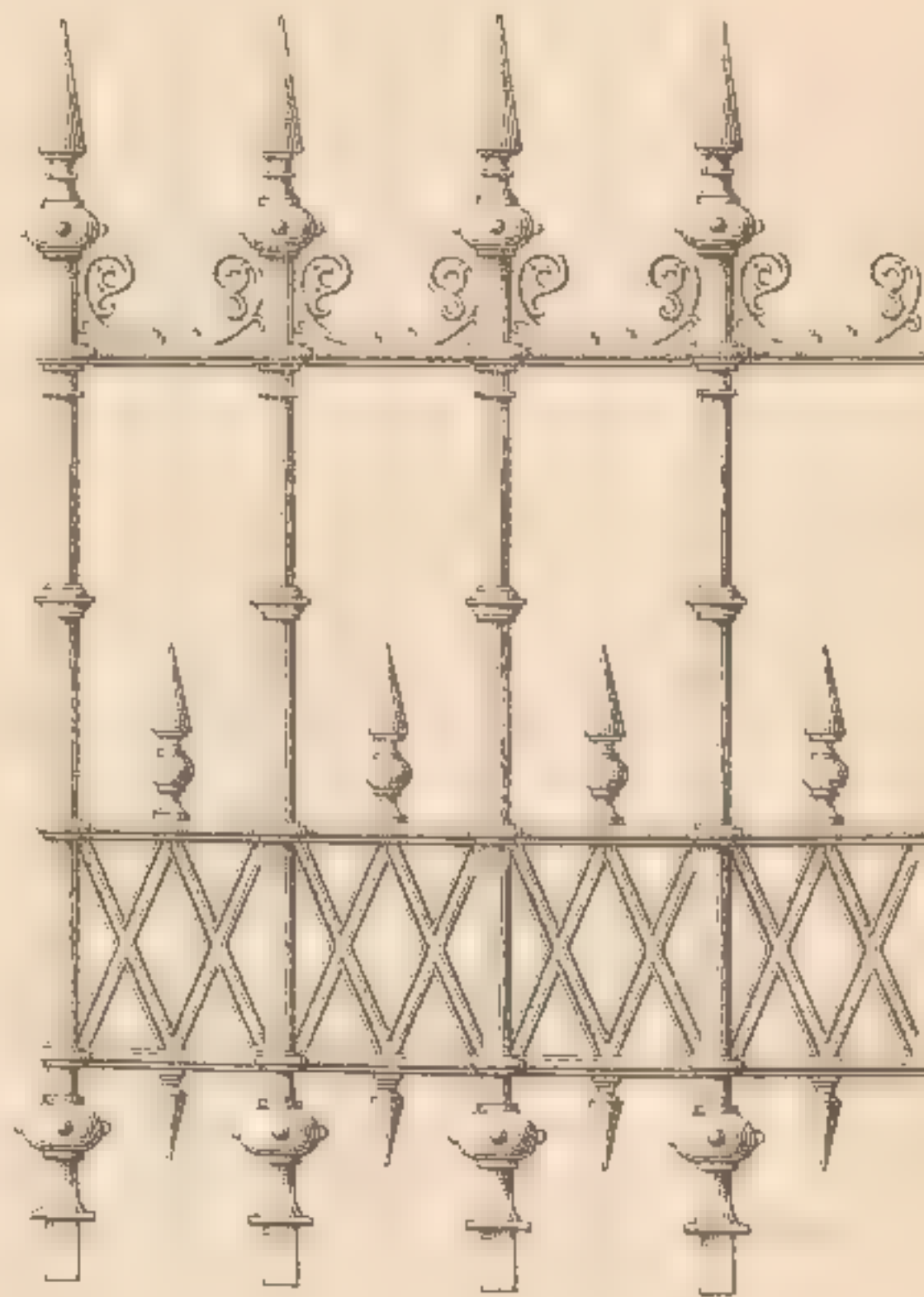
No 37



1
2
3
4

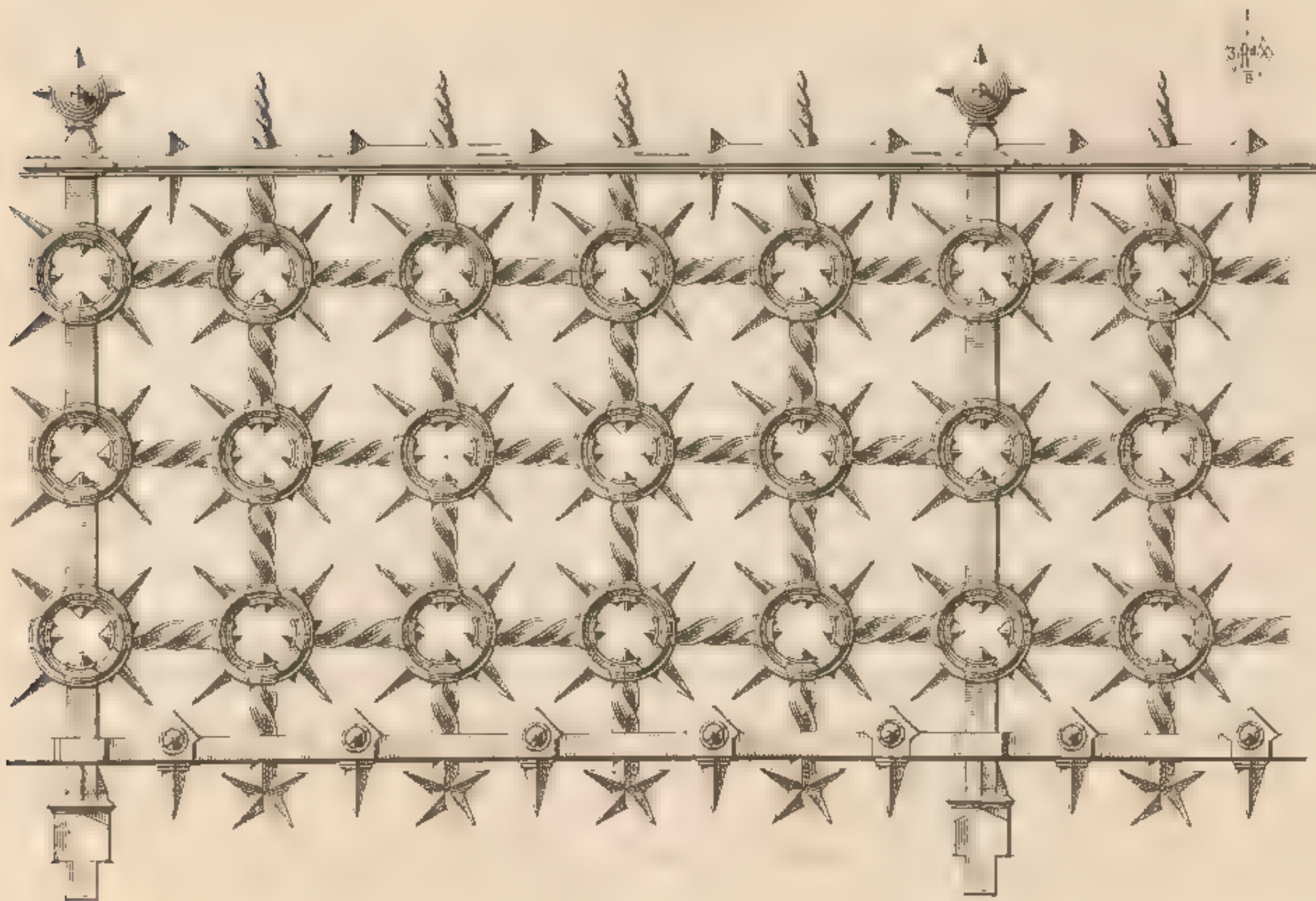
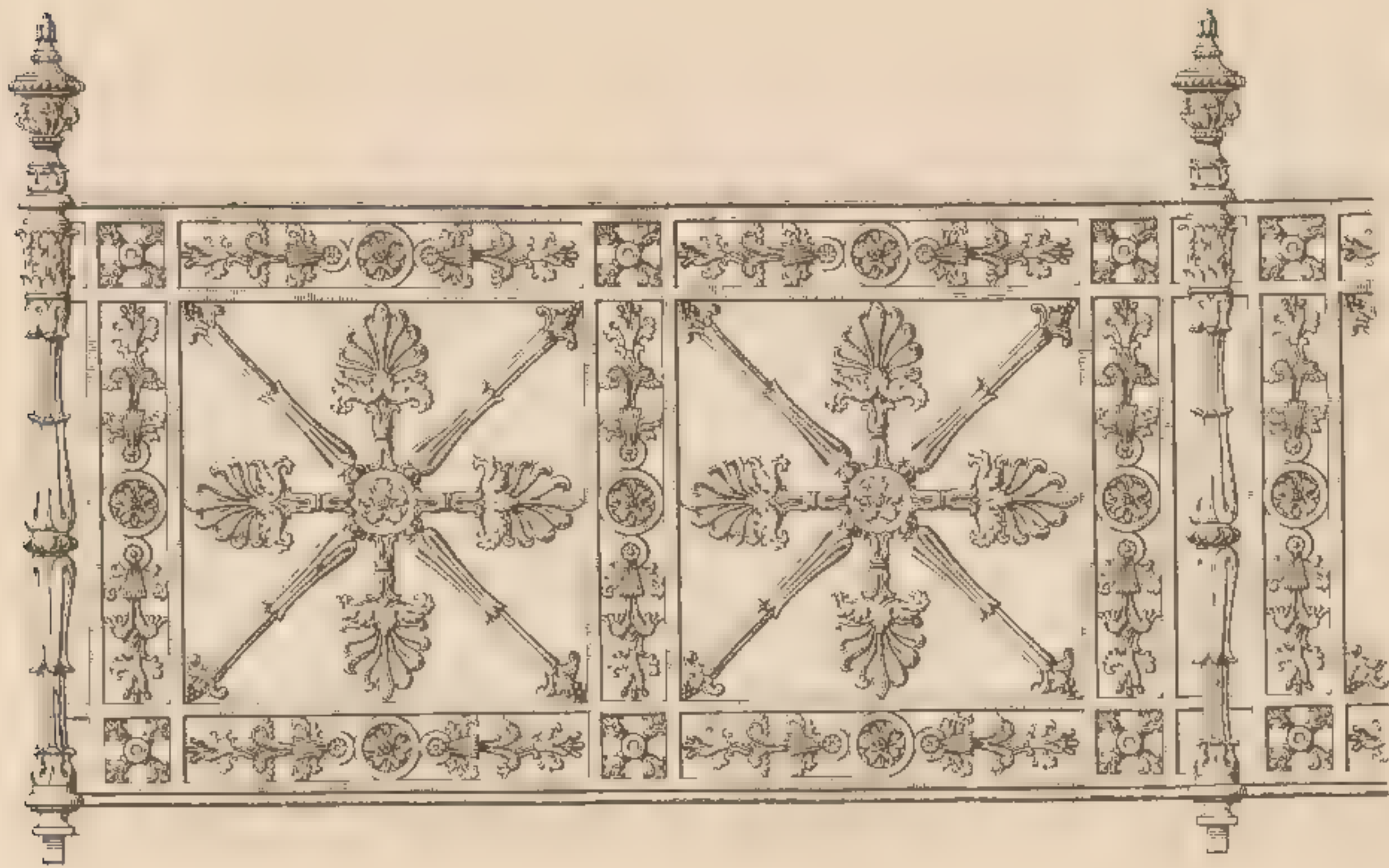


Nº 464



MACFARLANE'S RAILING &C

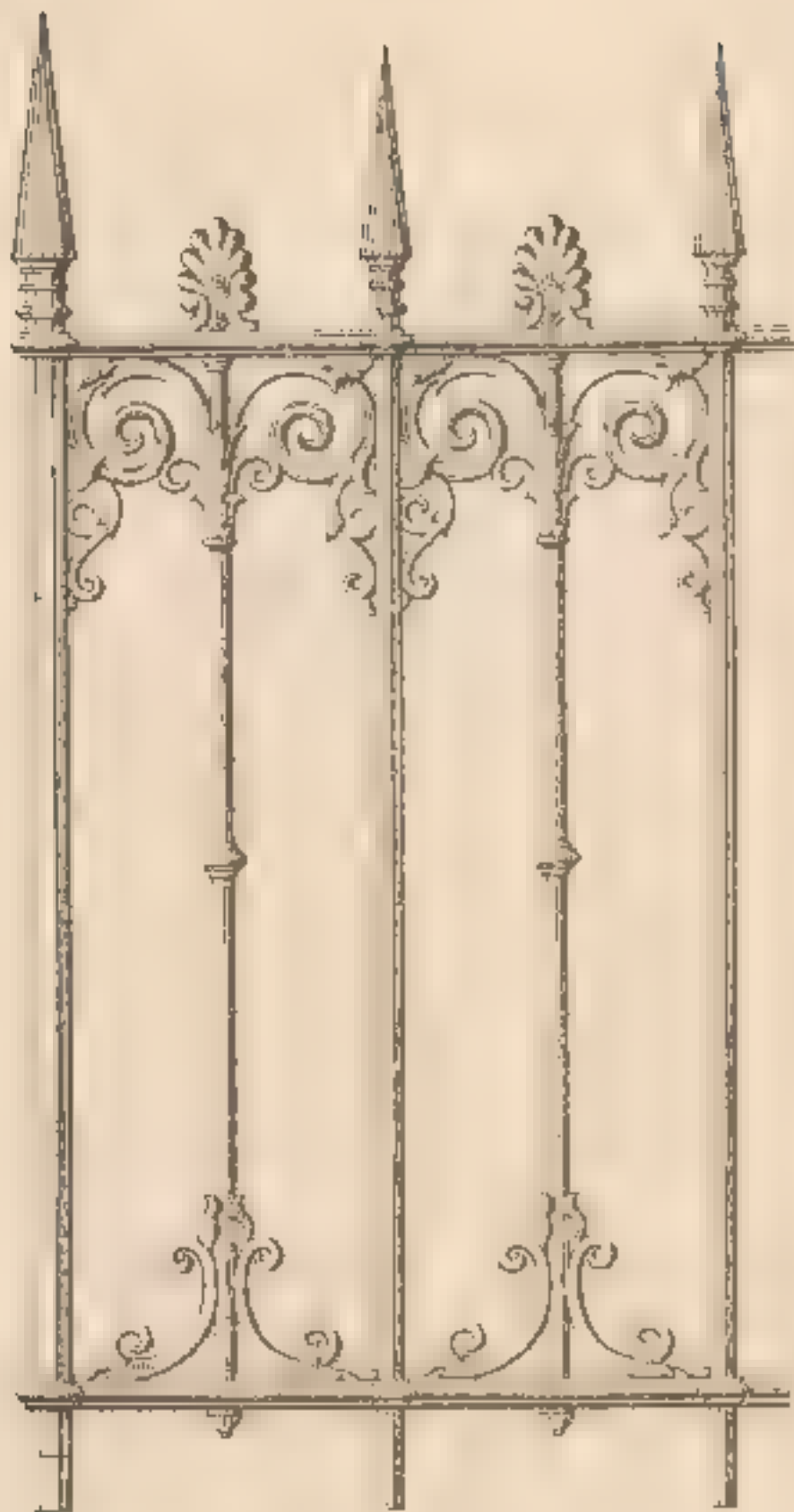
No 24



SCALE 1/4 INCH = 1 FOOT

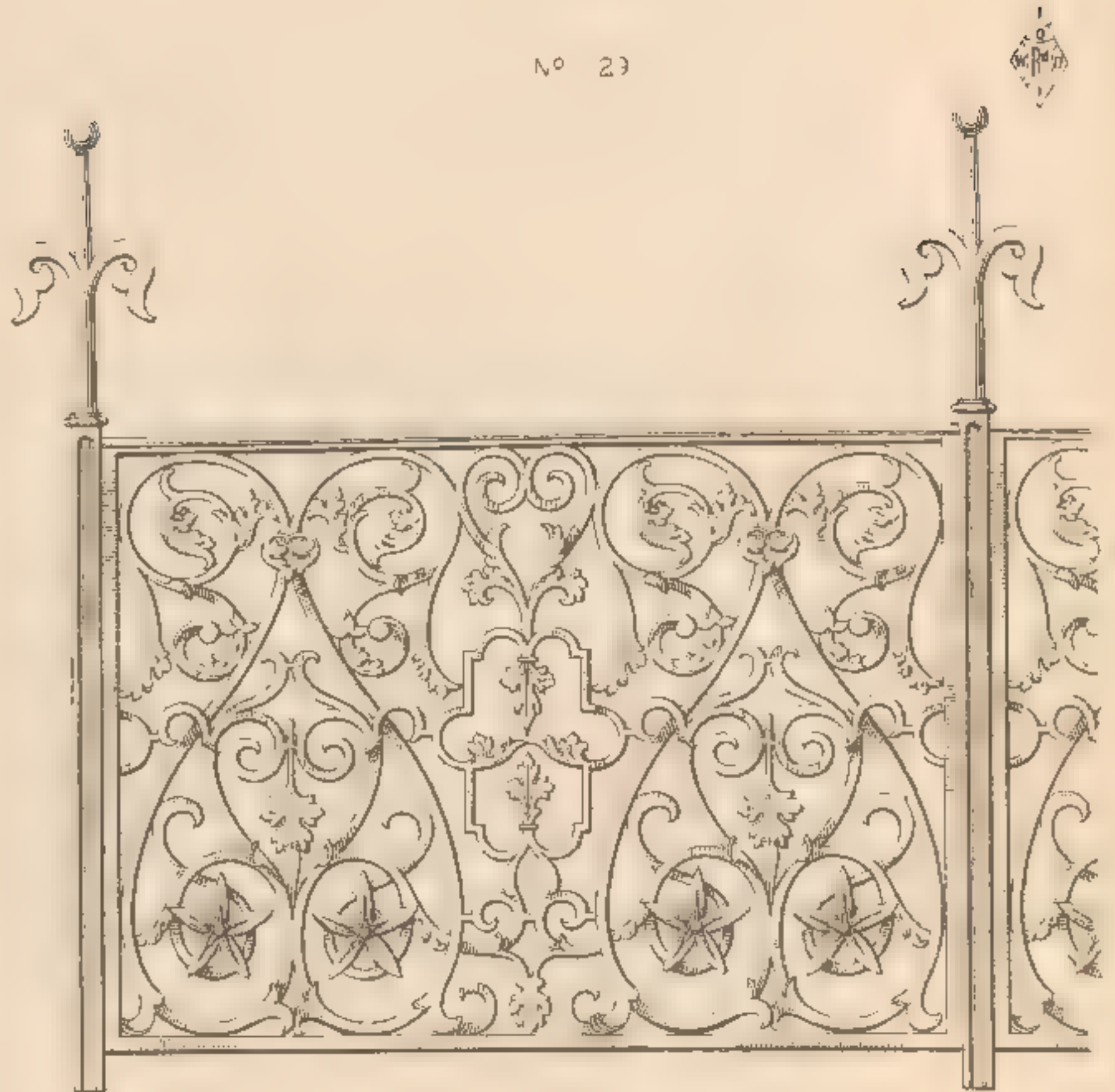
MACFARLANE'S RAILING & C

No 324



Standards *charged extra.*

No 23

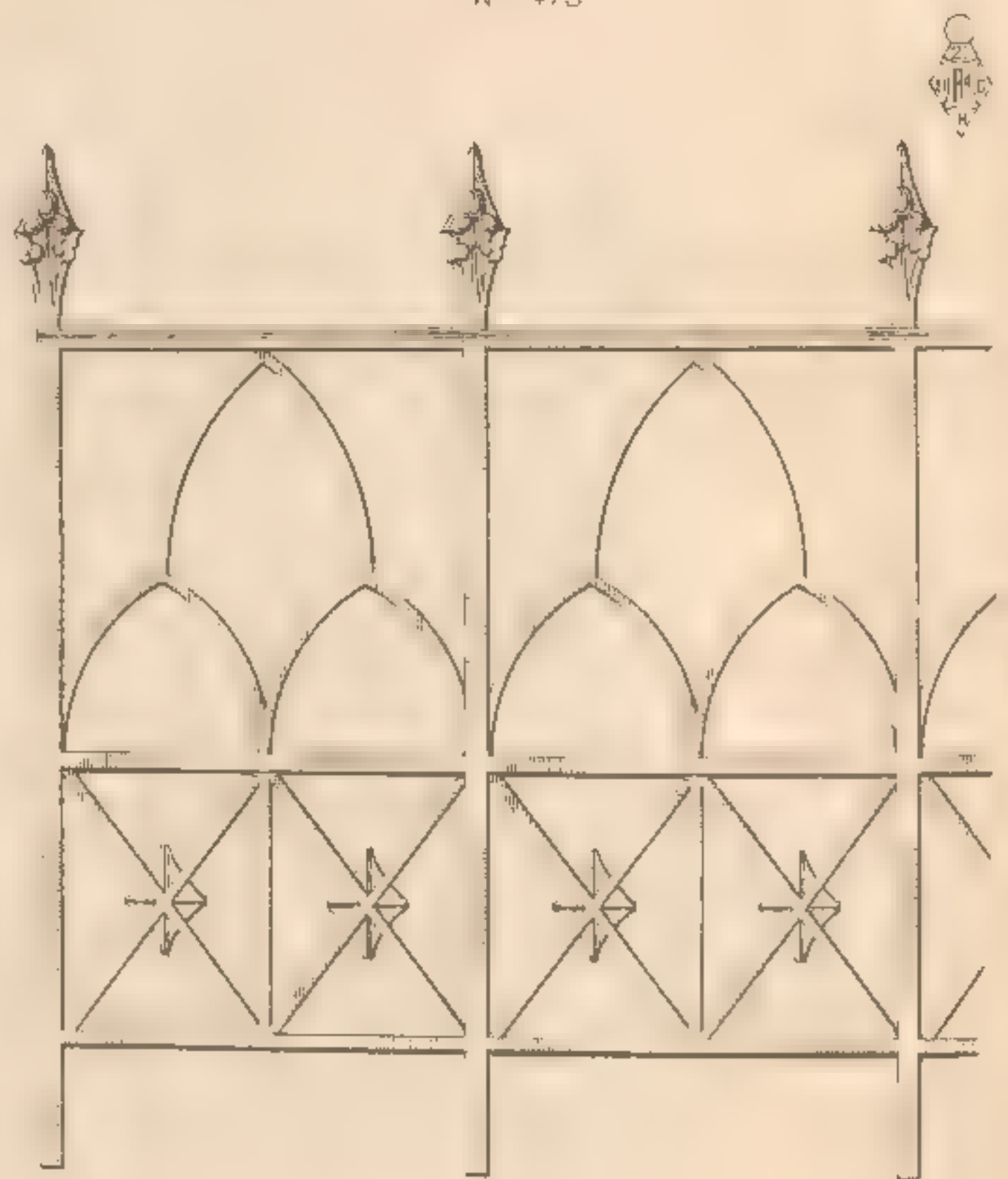


No 474



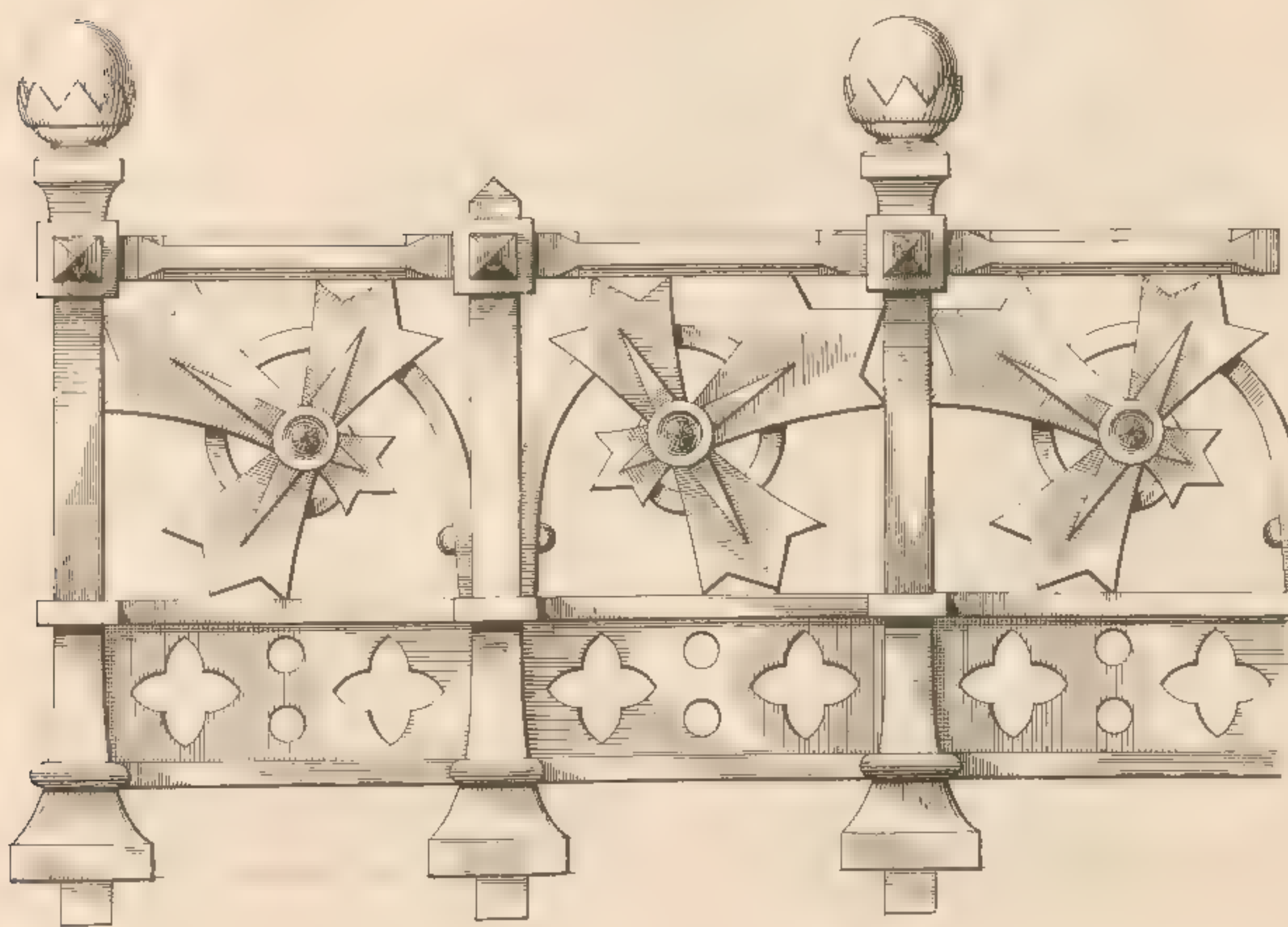
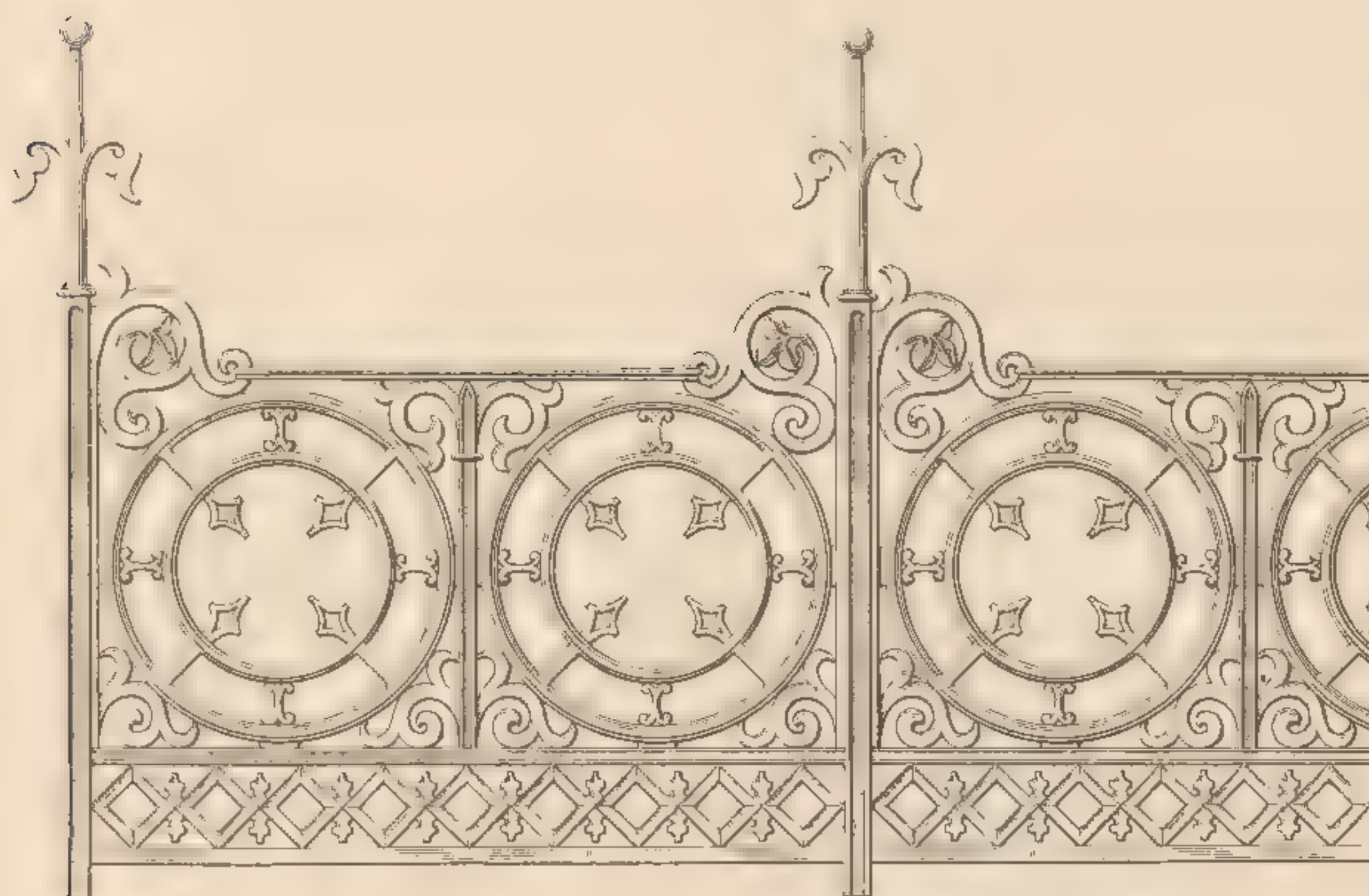
Standards *charged extra.*
For Backstay, see No. 474 Railing Standard.

No 473



For Backstay, see No. 473 Railing Standard.

MACFARLANE'S RA LING &c



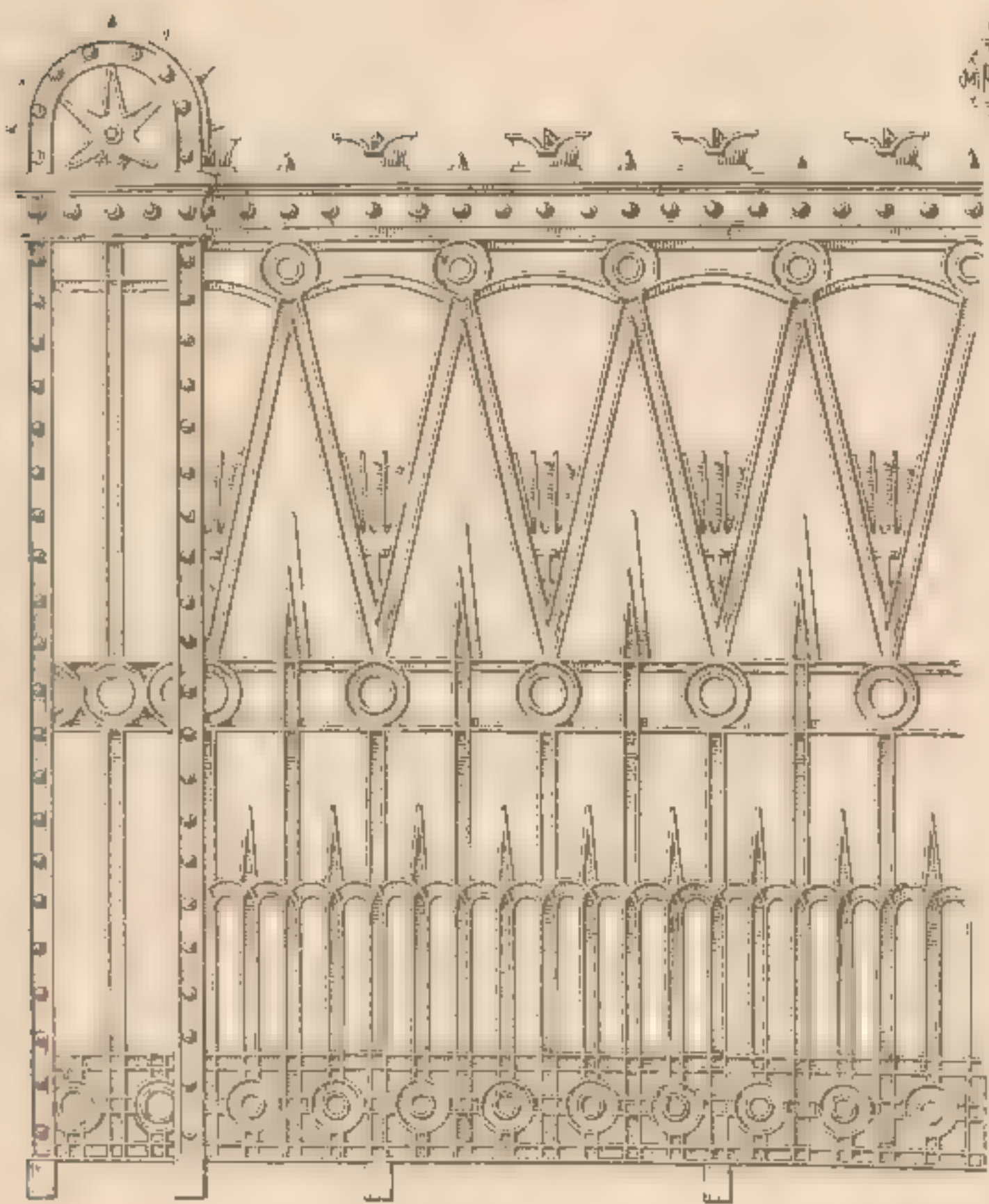
CRASH NCH = FOOT

124

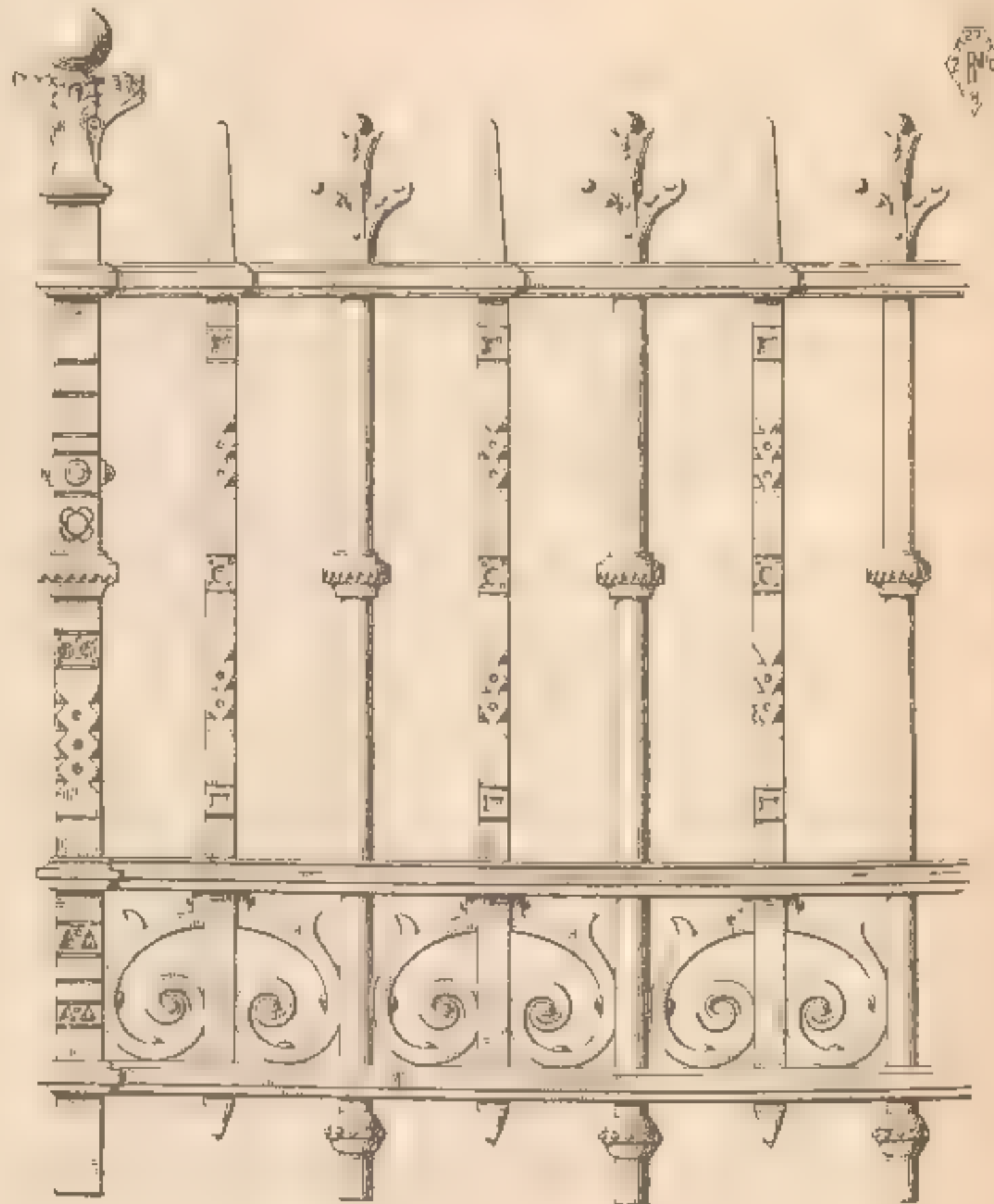


125

126



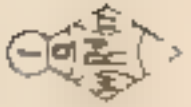
Standards charged extra.



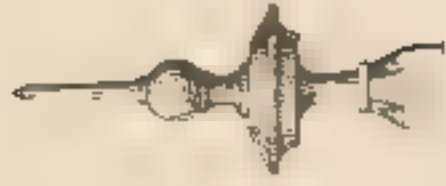
Standards charged extra.

SCALE 1 INCH = 1 FOOT

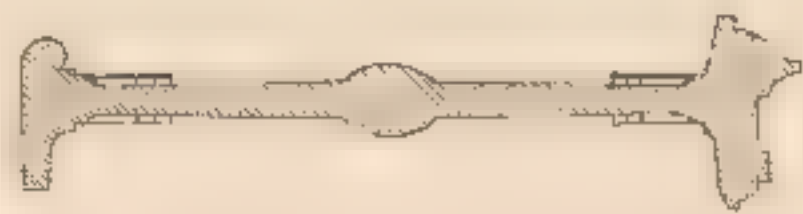
MA FAR, ALE ~ H A, A, A



No 149



CRS NINE A B



B

Main Circle repeats every 12' 3". See No. 243 Terminal Example, page 229.

MA FAR, ALE ~ H A, A, A

MA. PARANES RA NG &

Nº 204



A. E. 1 N. 1. 3 1

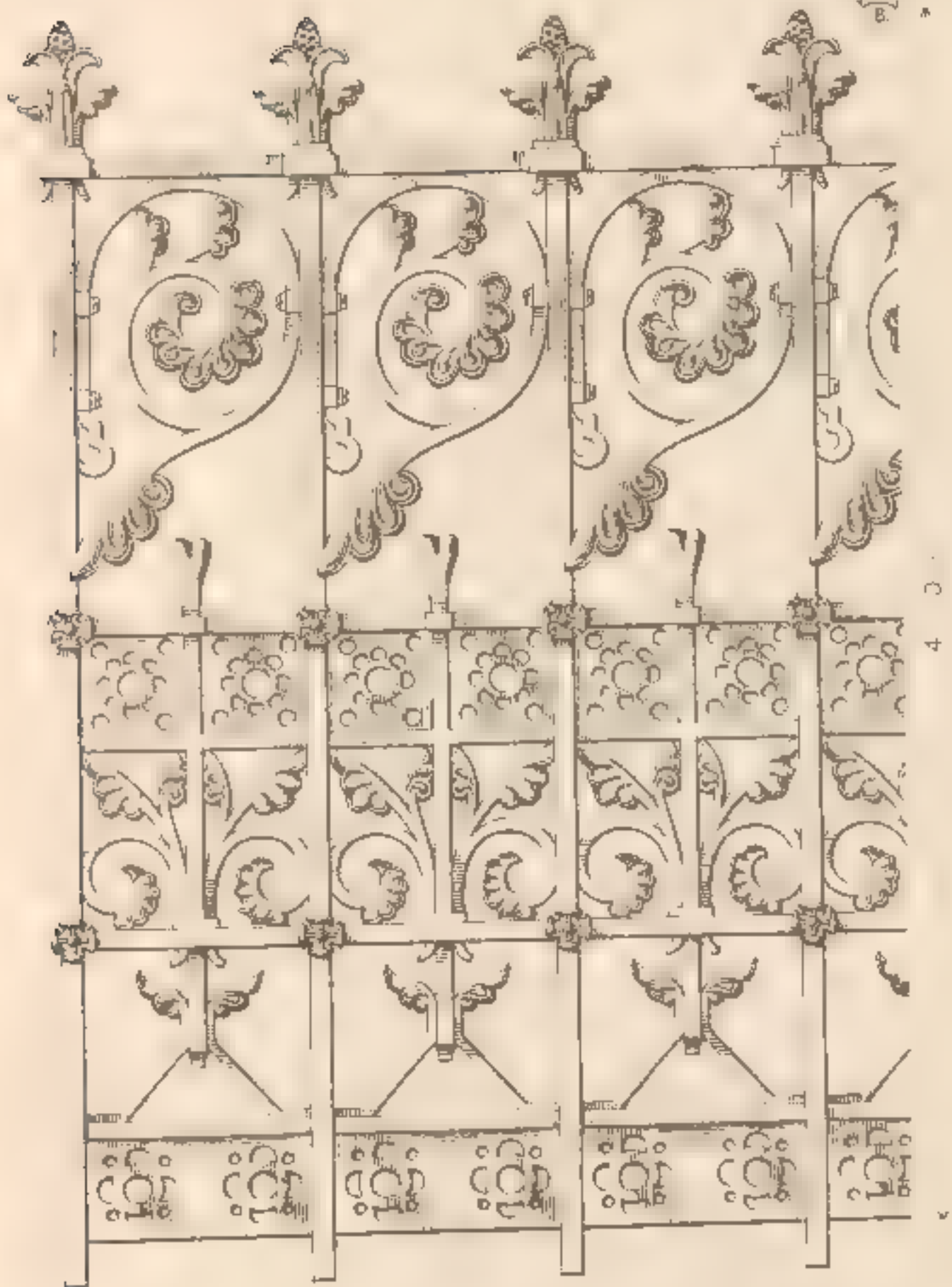
MACFARLANE'S RAILING &c

N 43



4 3

N 21



4 3

N 87

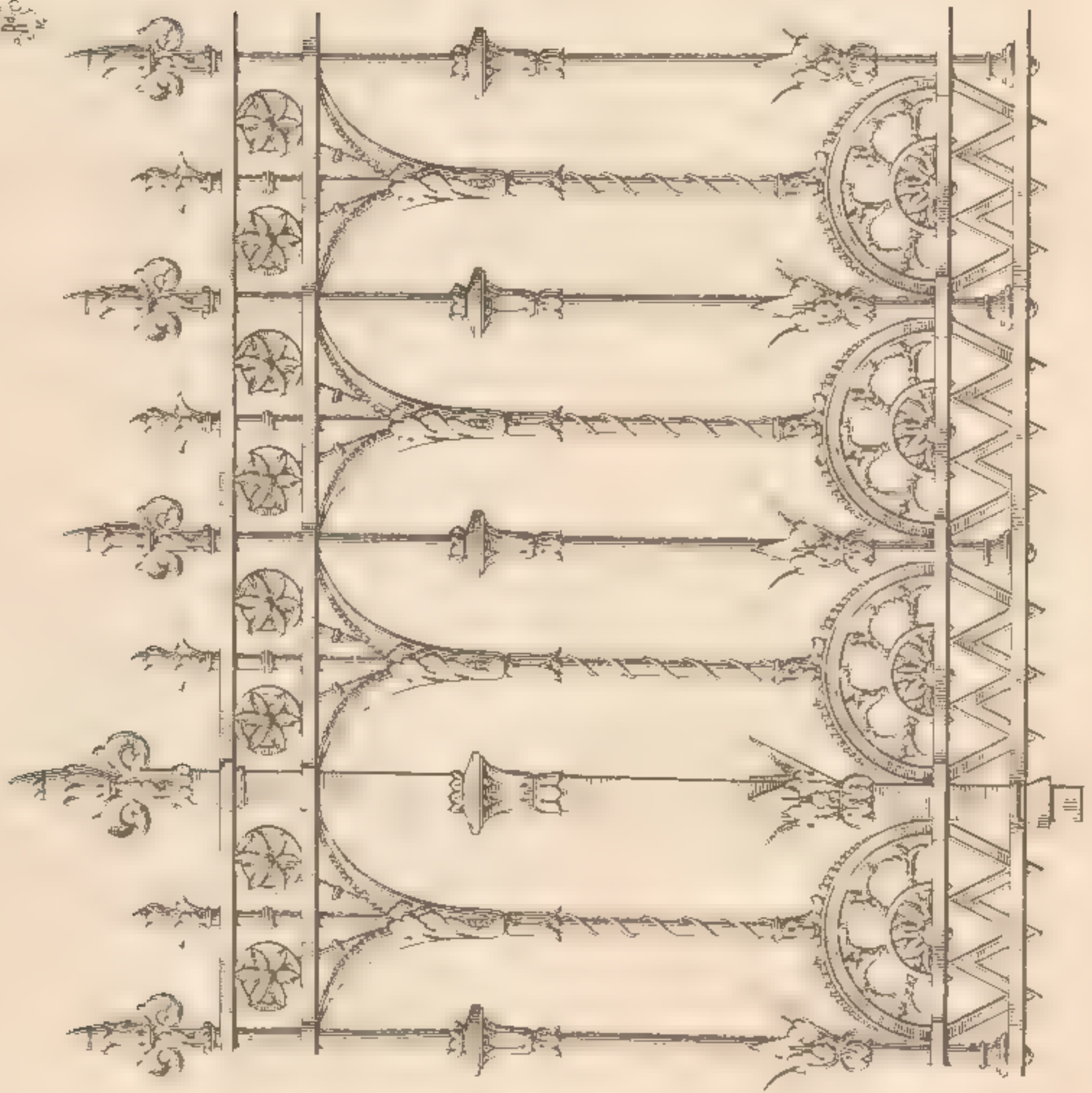


5 7

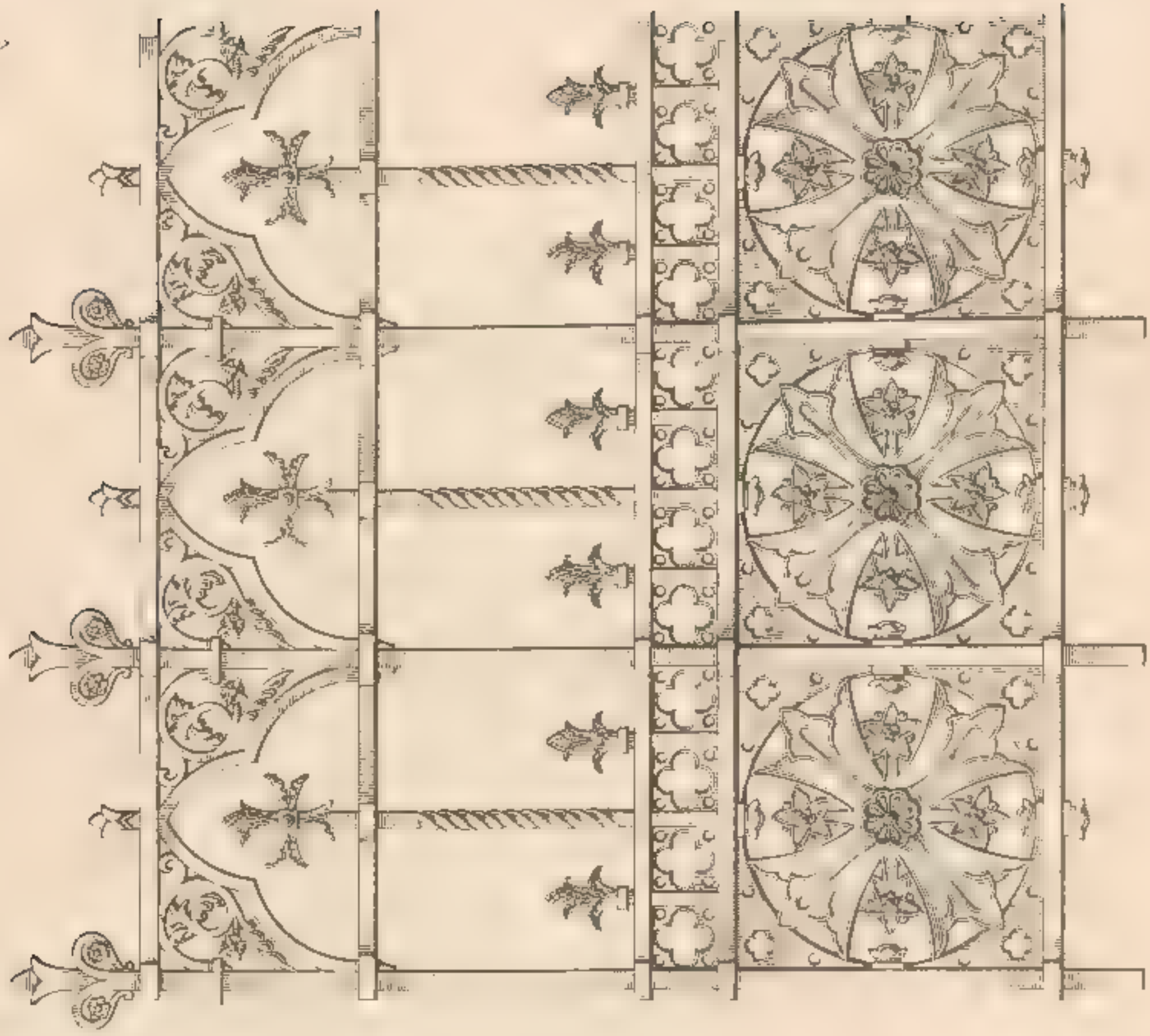
CA N. H.

MACFARLANE'S RAILING & C

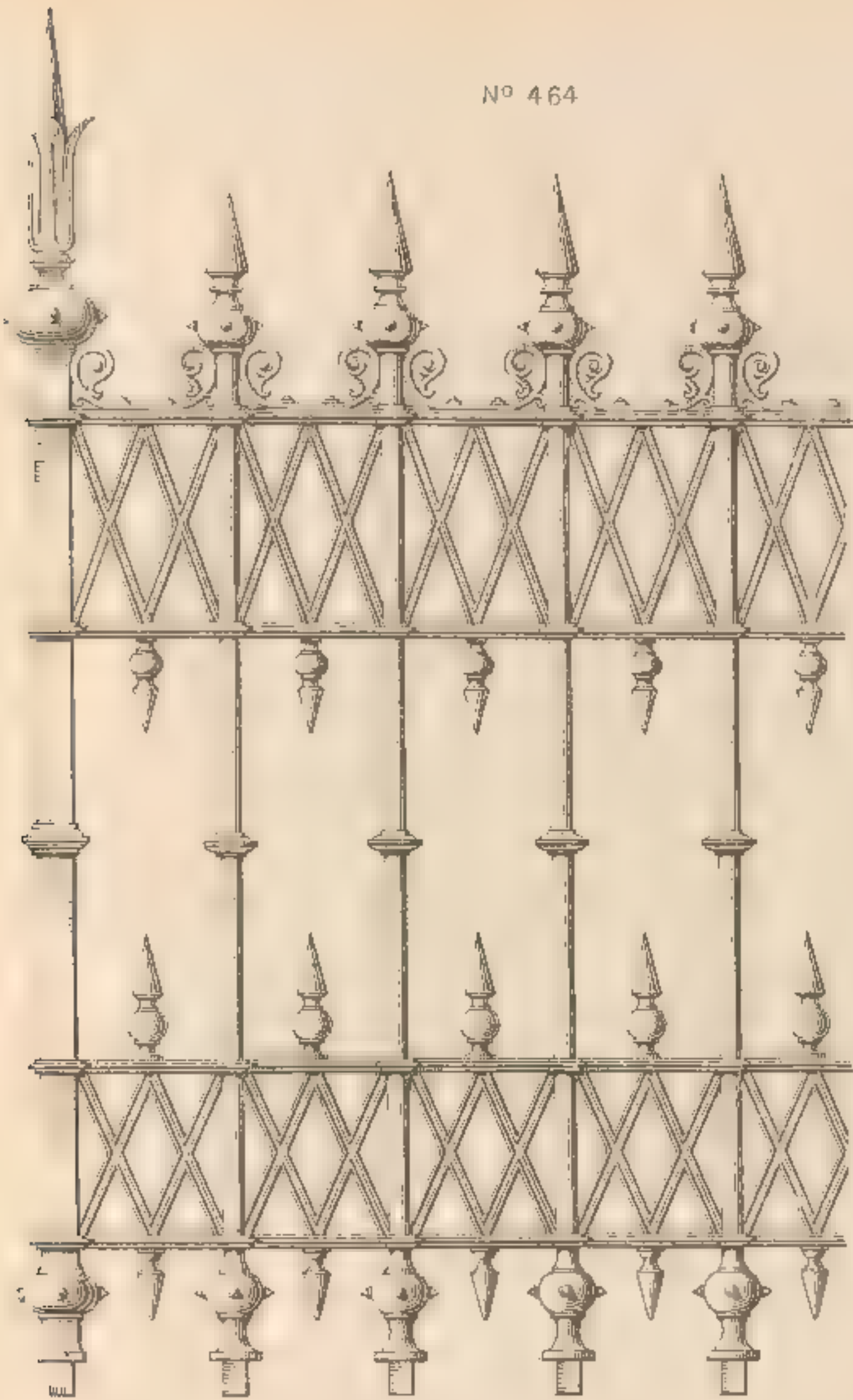
No 773



No 457



Nº 464



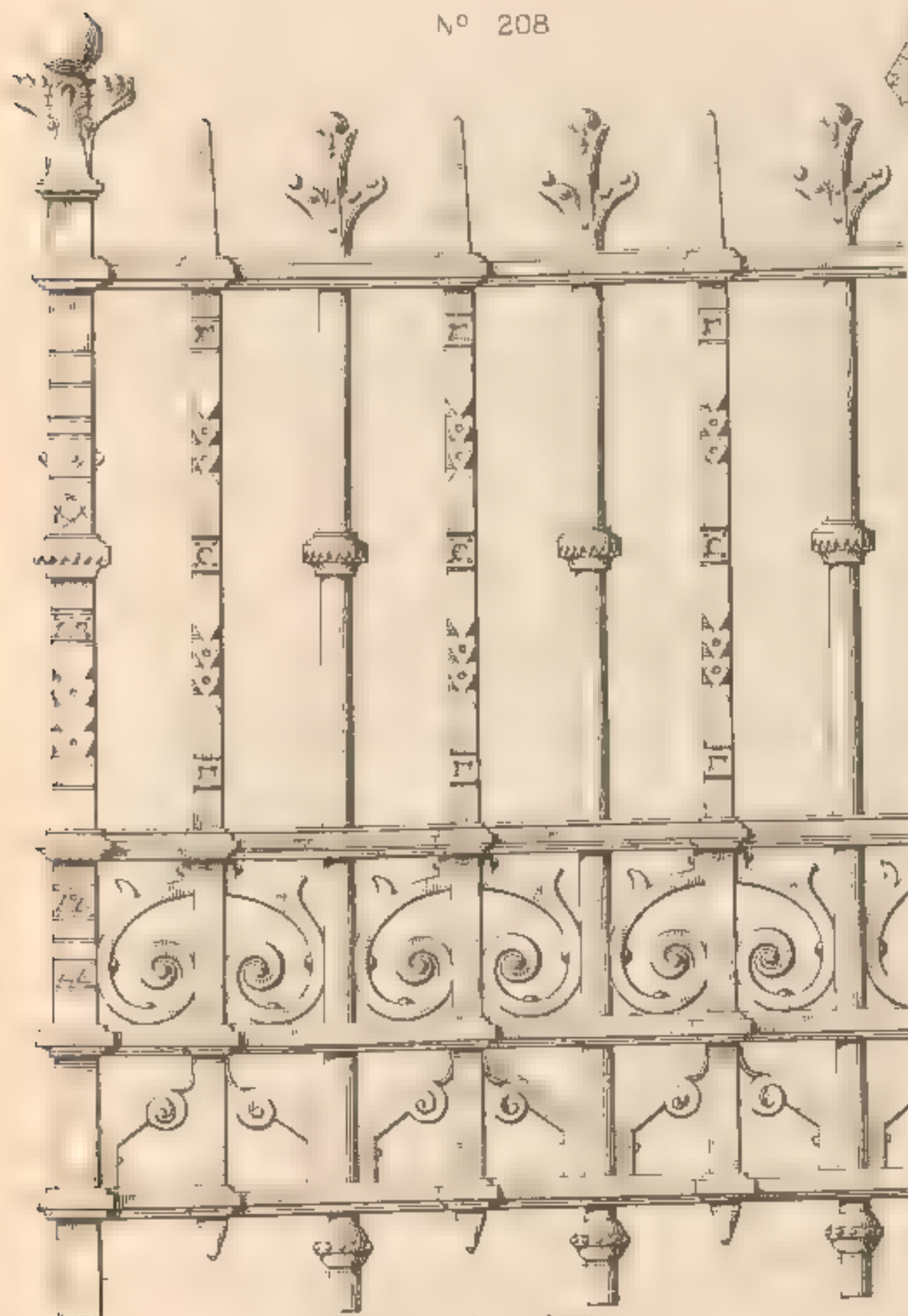
Standards charged extra.

For Backstay, see No. 464 Railing Standard.

5 6



Nº 208



Standards charged extra.

For Backstay, see No. 208 Railing Standard.

5 6



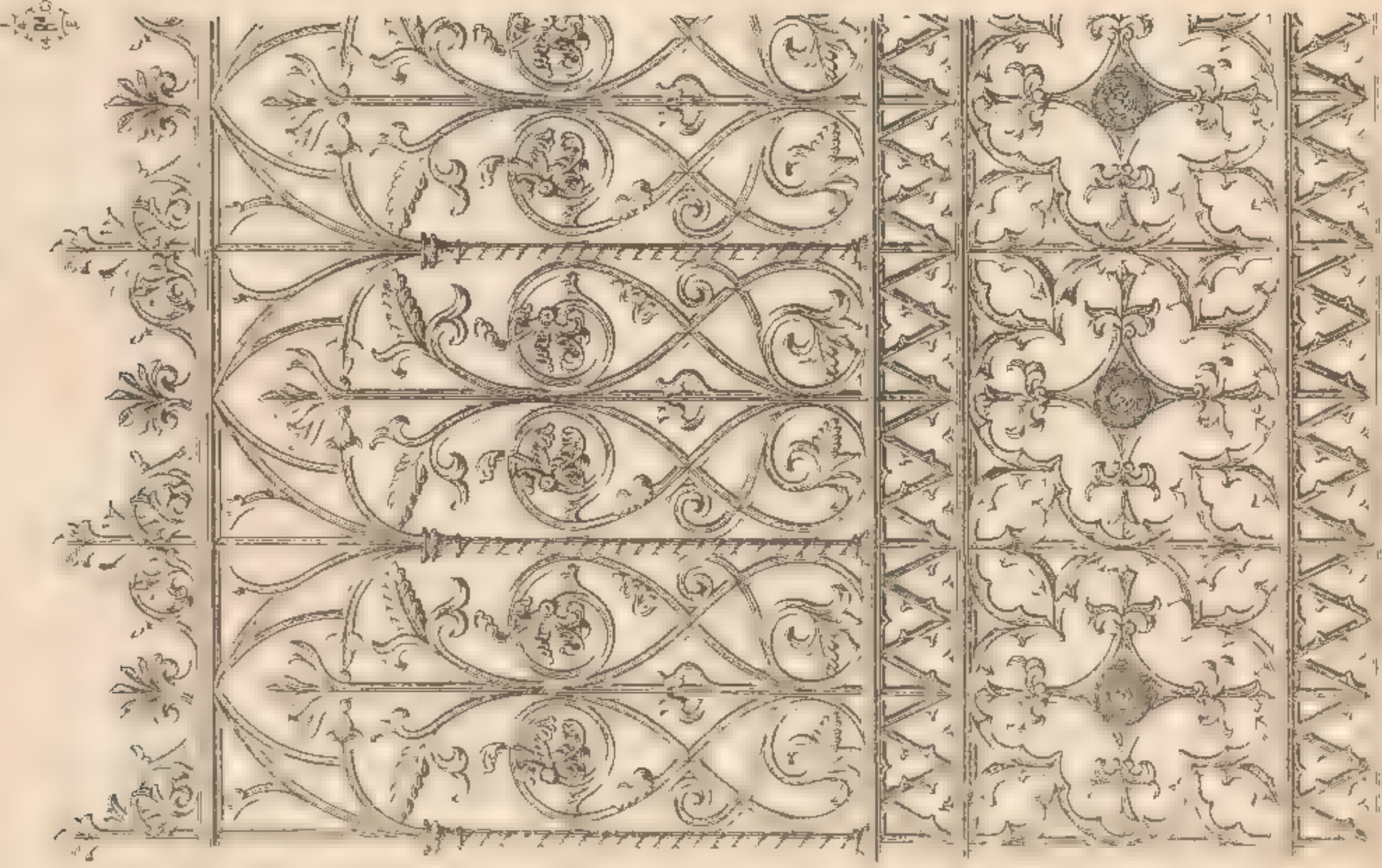
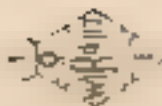
5 6

SCALE 1 INCH =

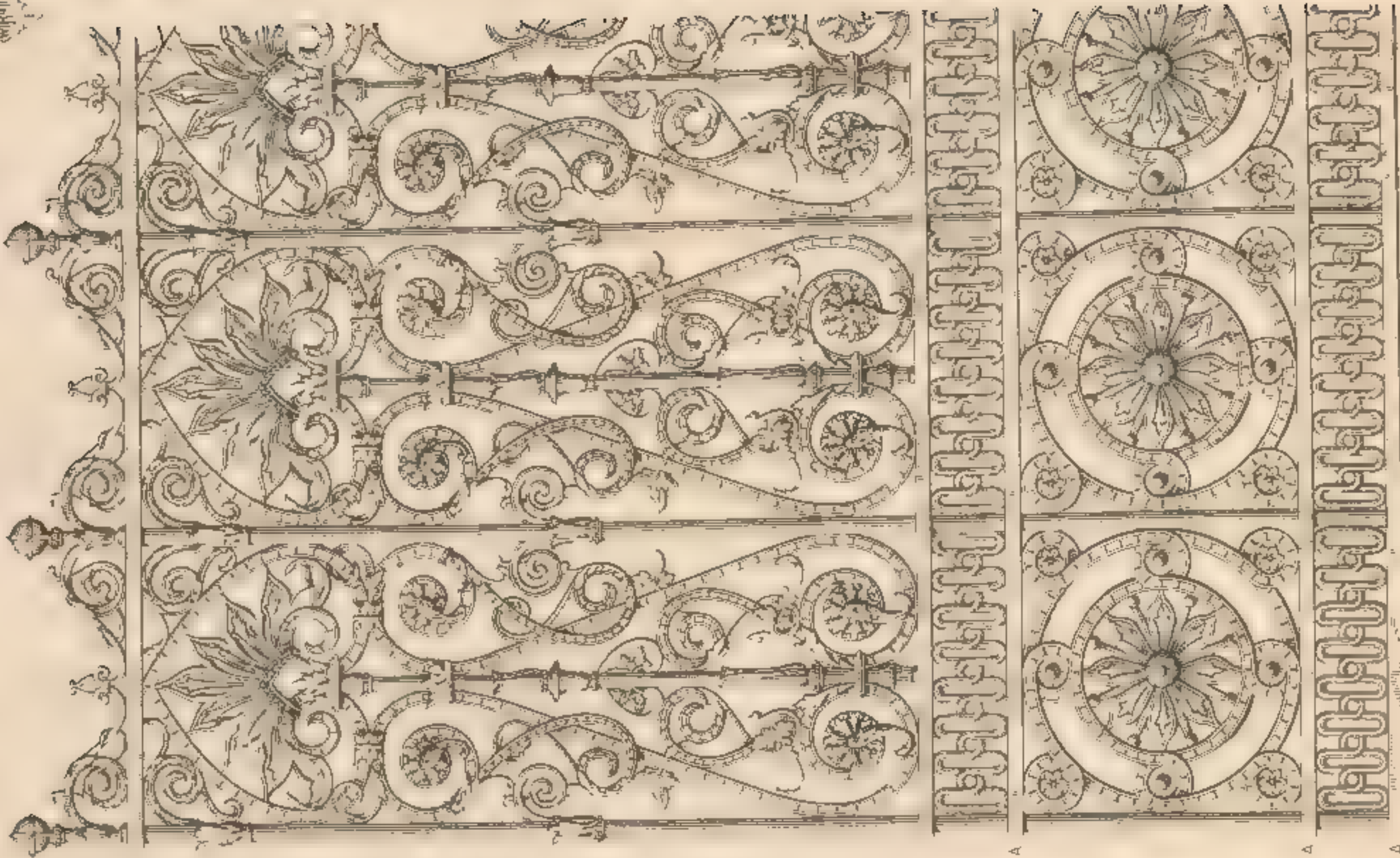
M. A. MARLANE'S PATENT'S

N^o 84

N^o 63



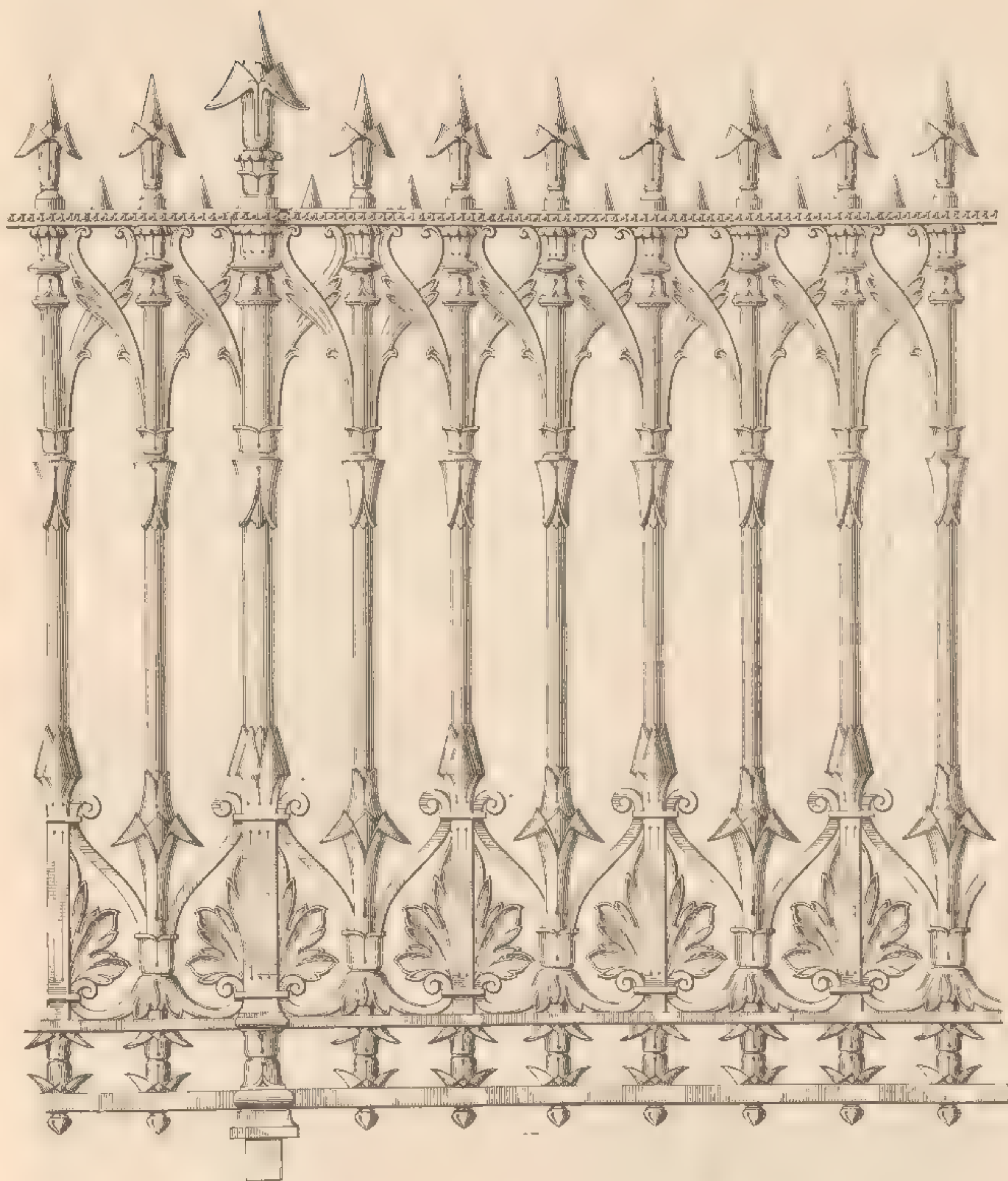
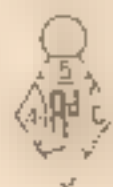
The rails marked A are wrought iron.



The rails marked A are wrought iron.

MACFARLANE'S RAILING &C

No 774



SCALE 1 INCH = 1 FOOT

Nº 297



Nº 368



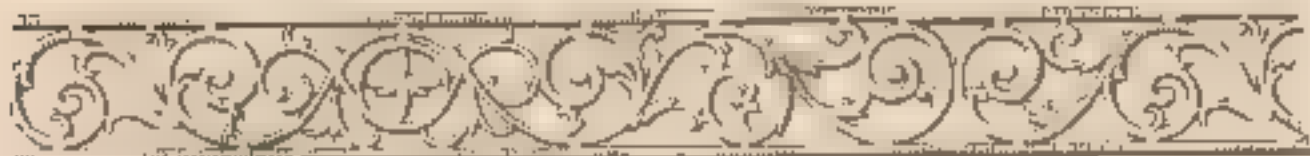
Nº 471



Nº 298



Nº 472



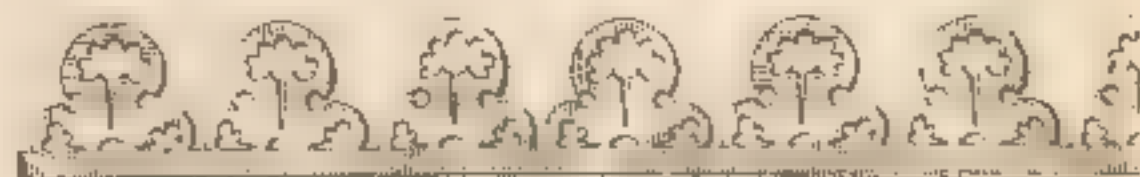
Nº 297



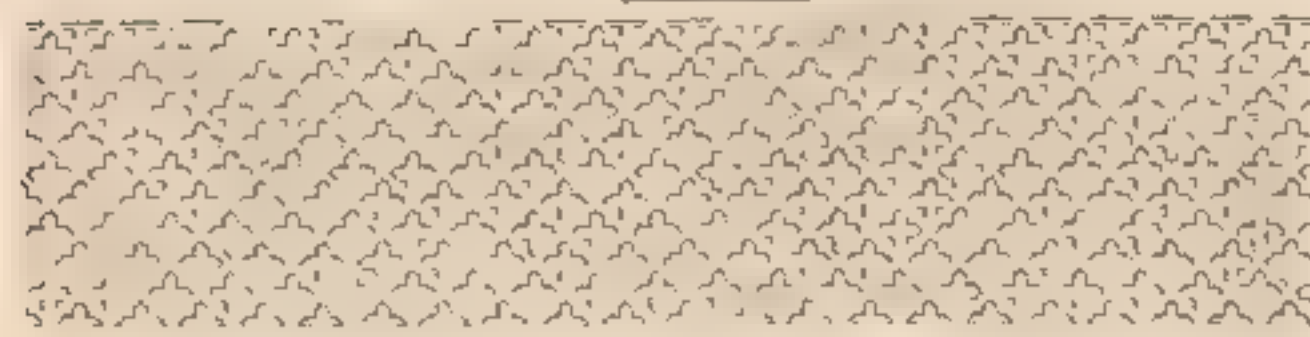
Nº 473



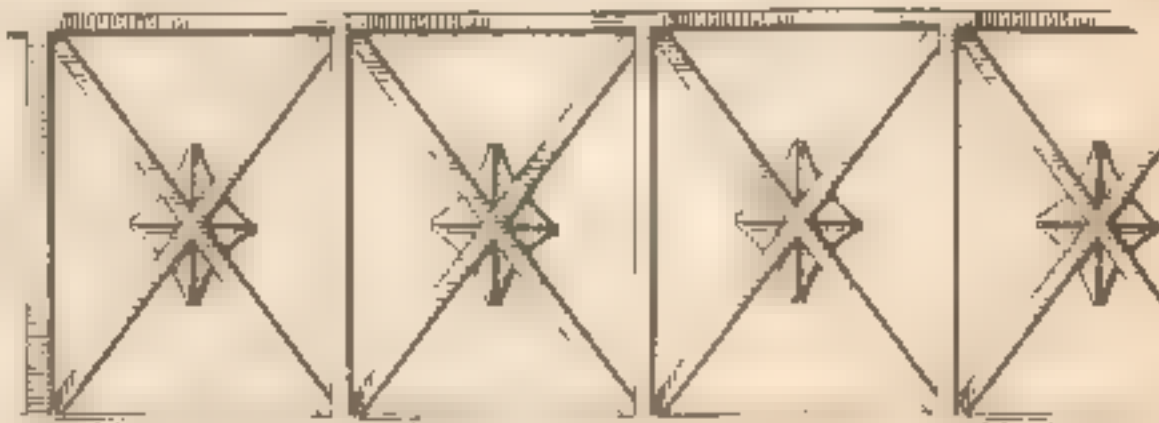
Nº



Nº 474



Nº 473



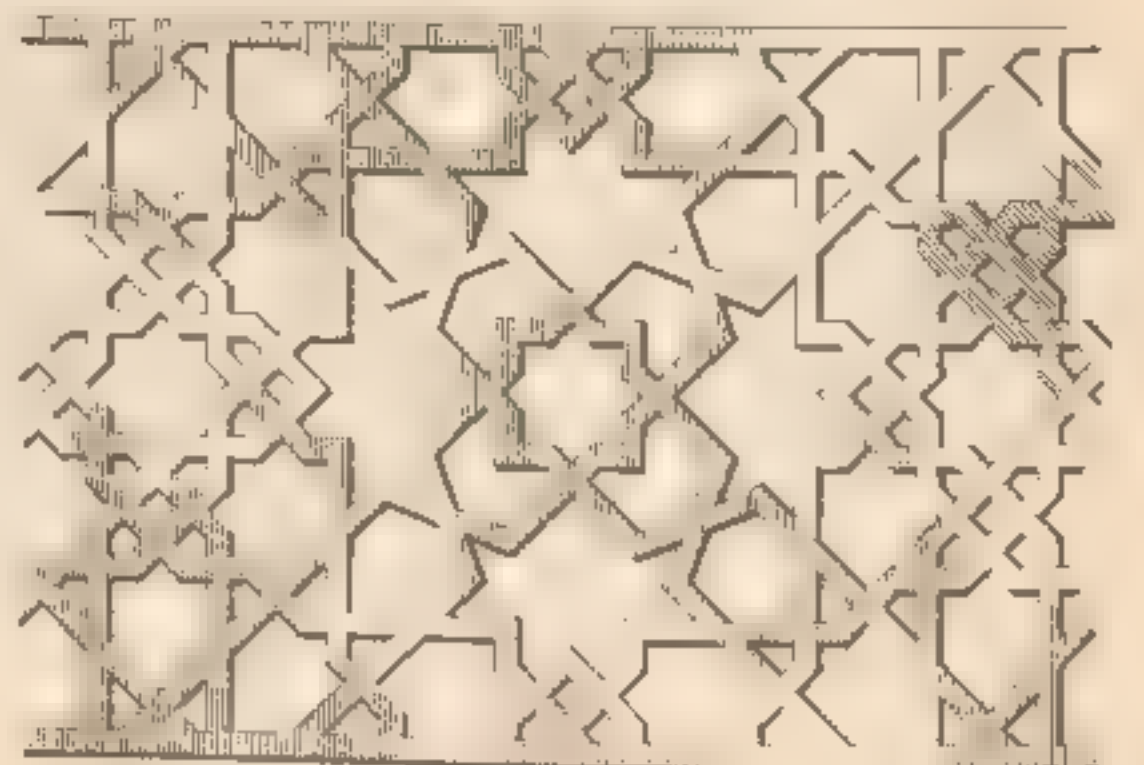
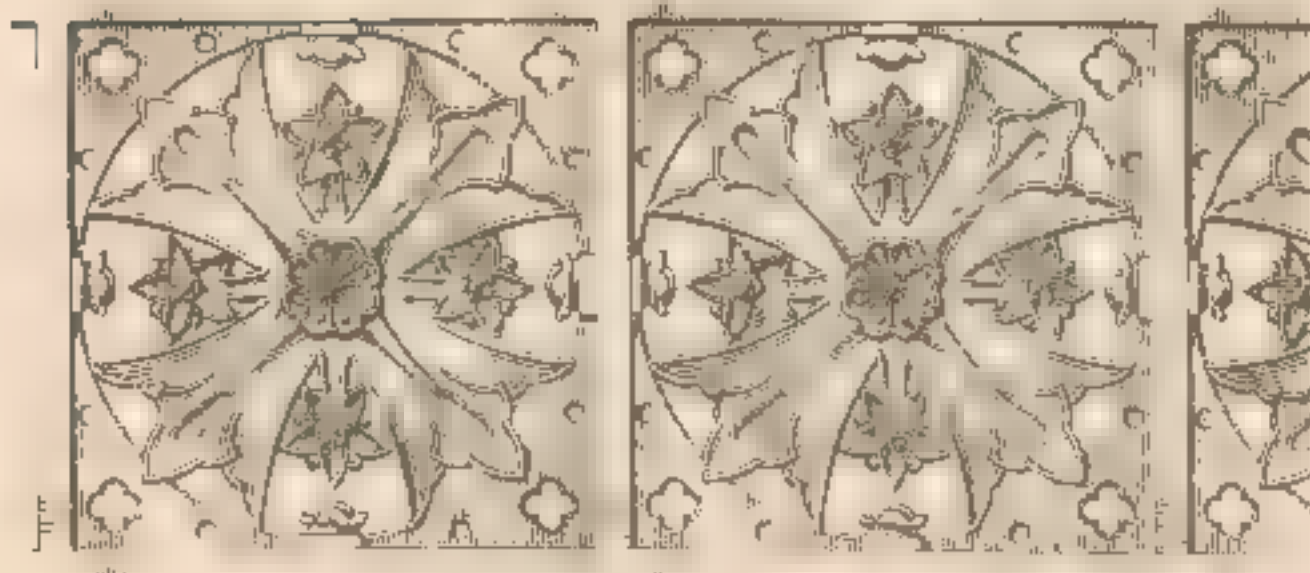
Nº 475



Nº 474

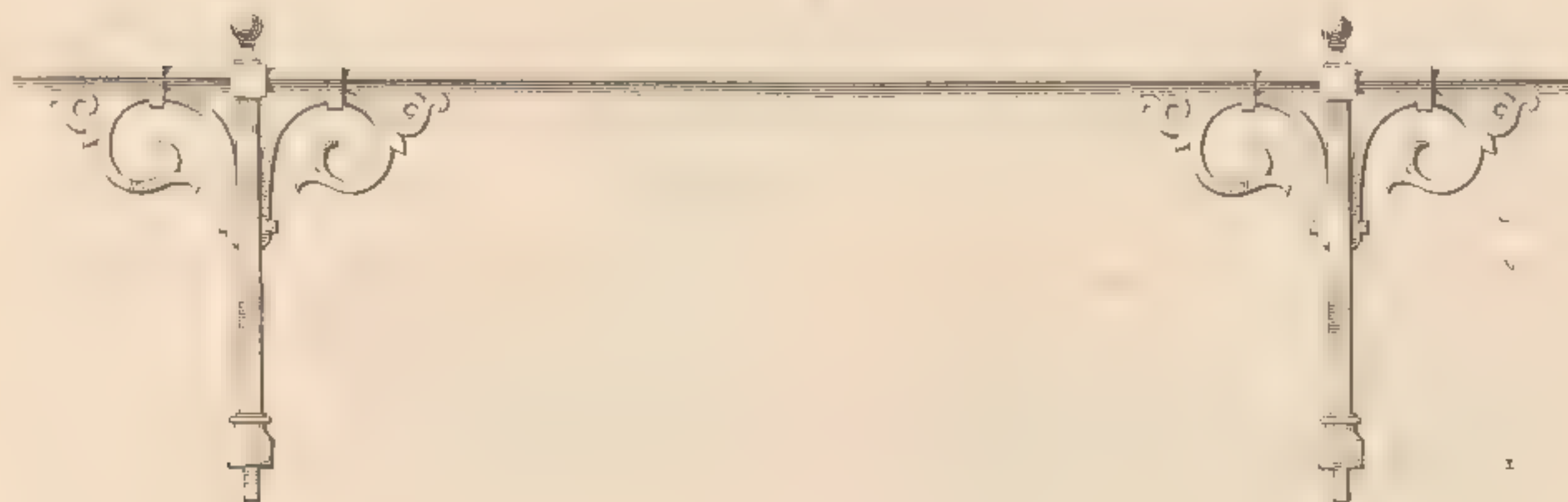


Nº 76

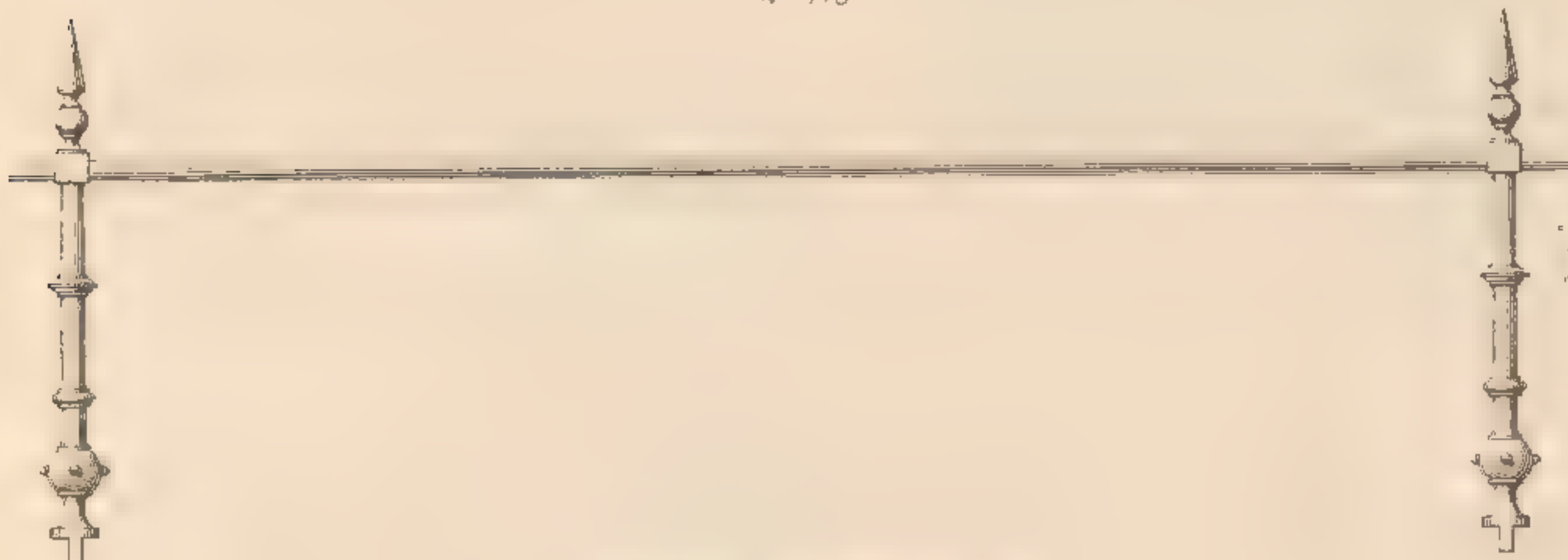


MACFARLANE'S RAILING &C

No 99

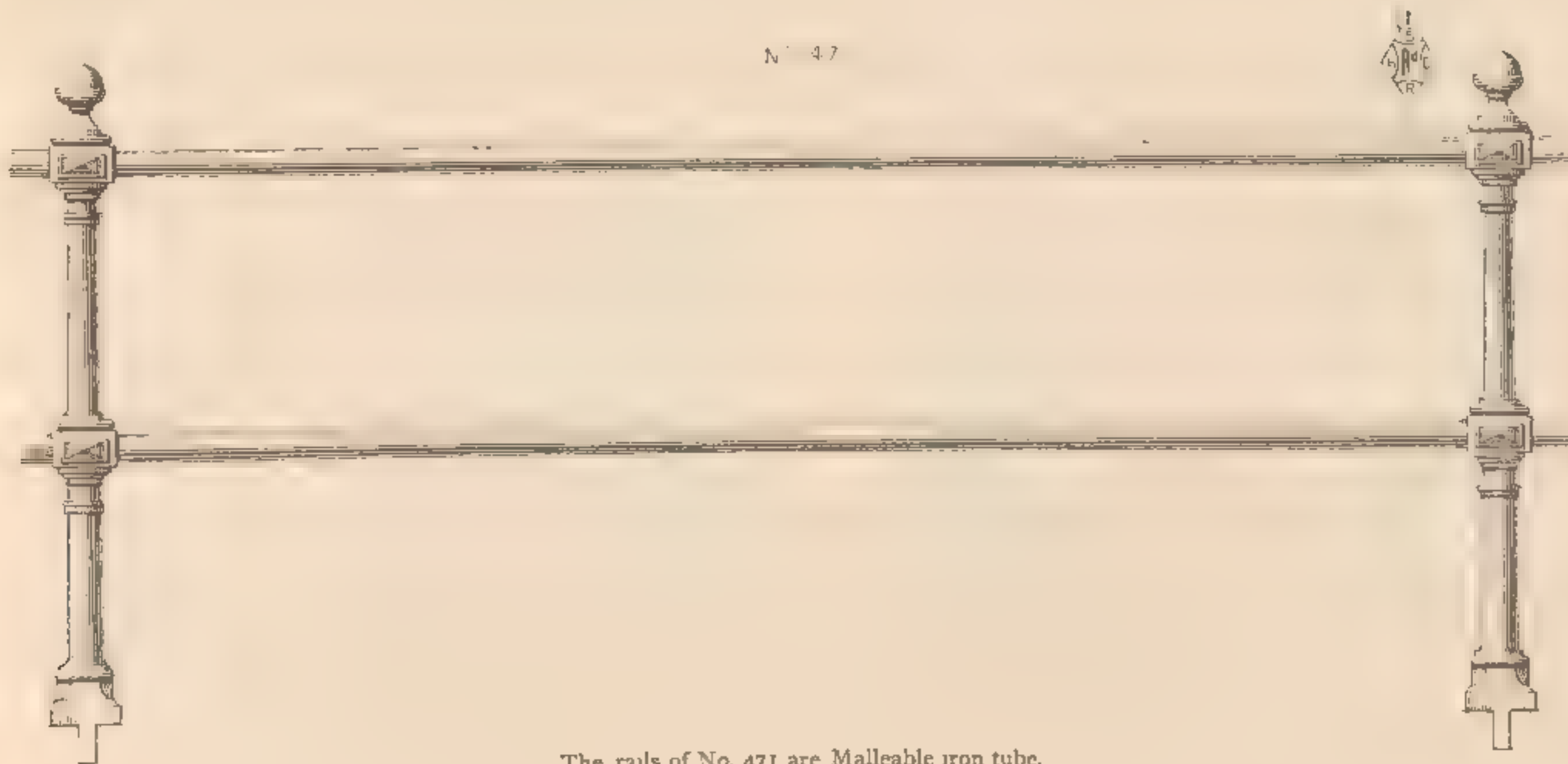


No 775



The rail of No. 775 is Malleable iron tube.

No 47

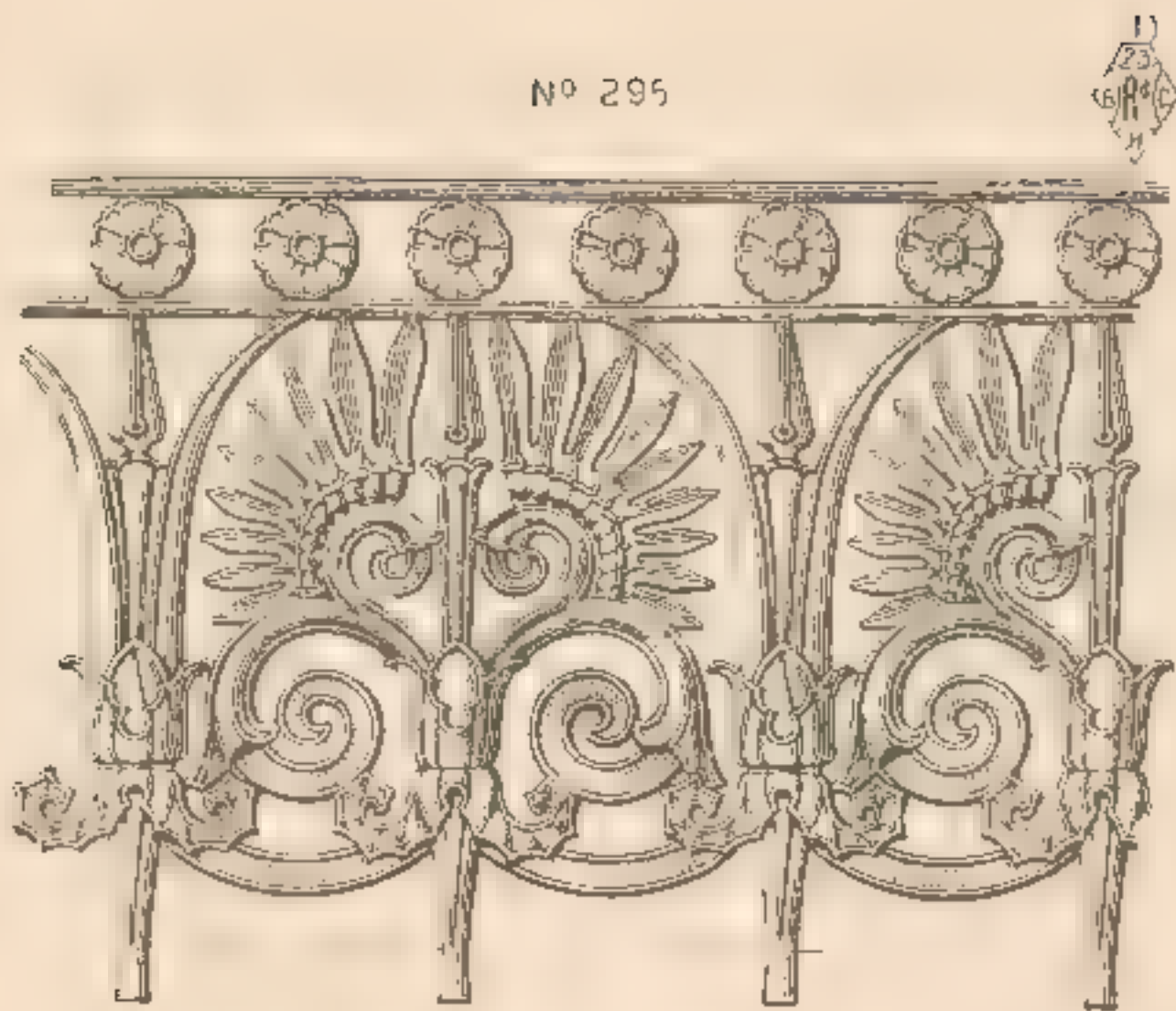


The rails of No. 47 are Malleable iron tube.

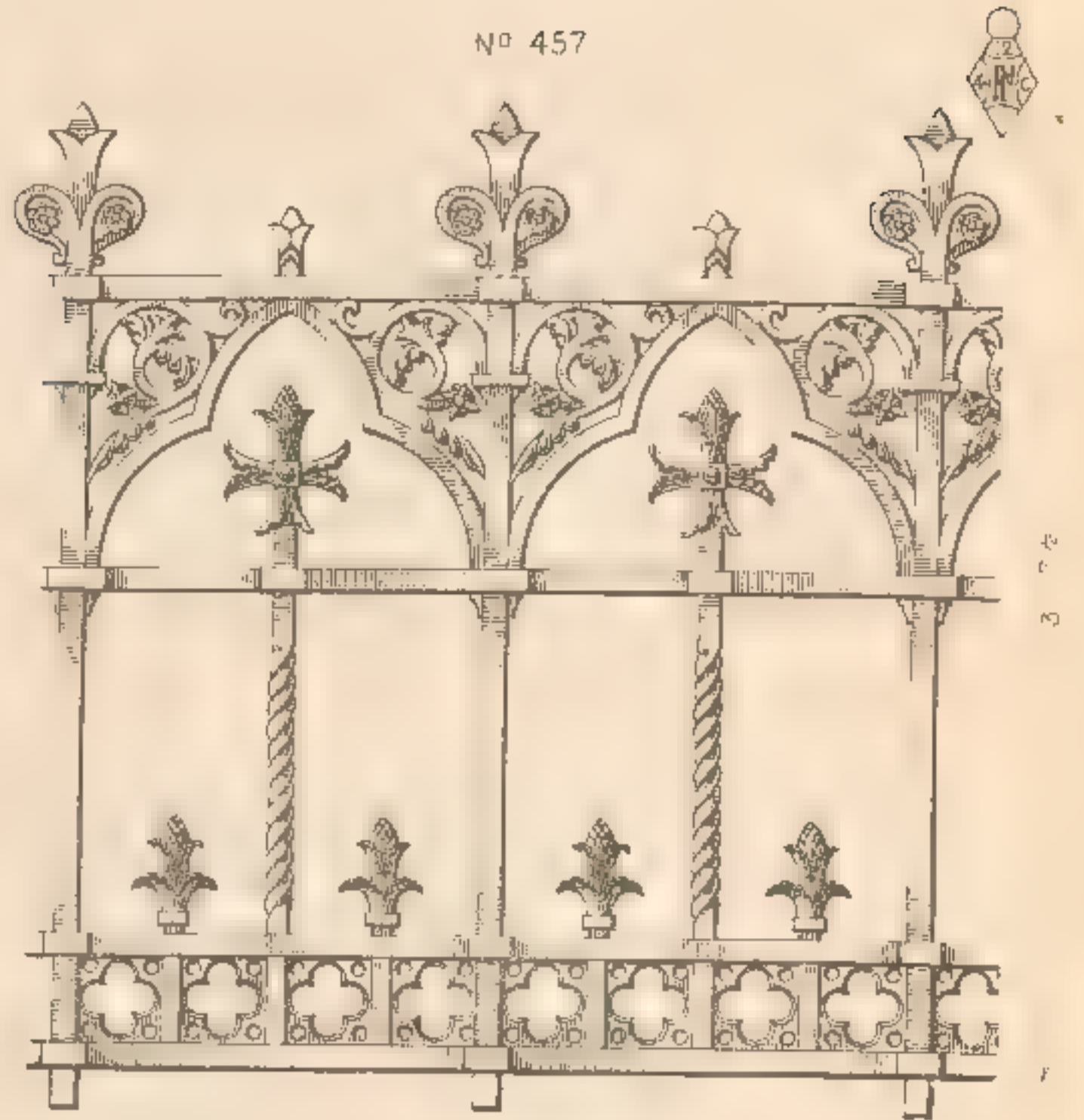
SCALE INCH — 1 FOOT

MACFARLANE'S RAILING & CO

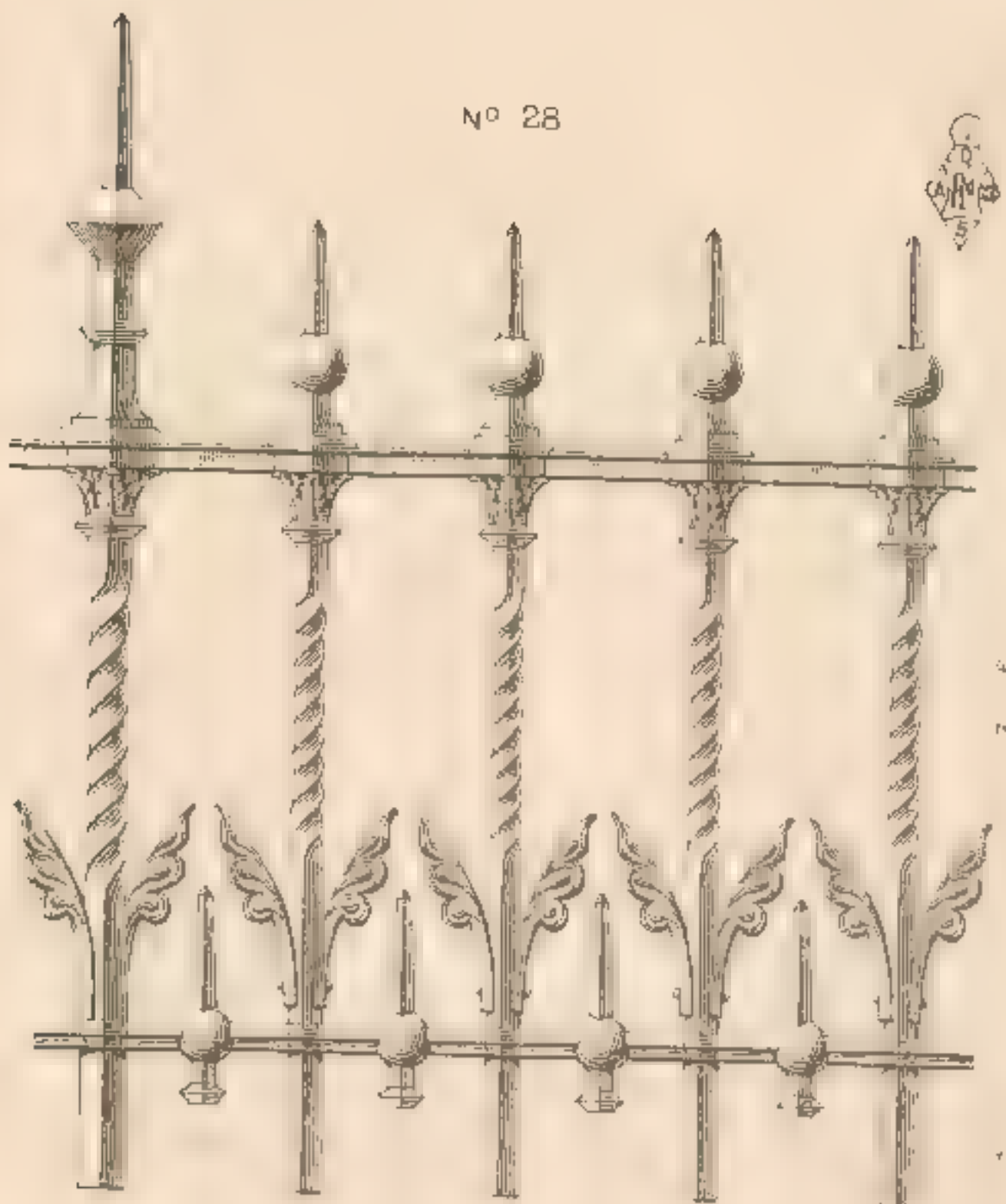
Nº 295



Nº 457

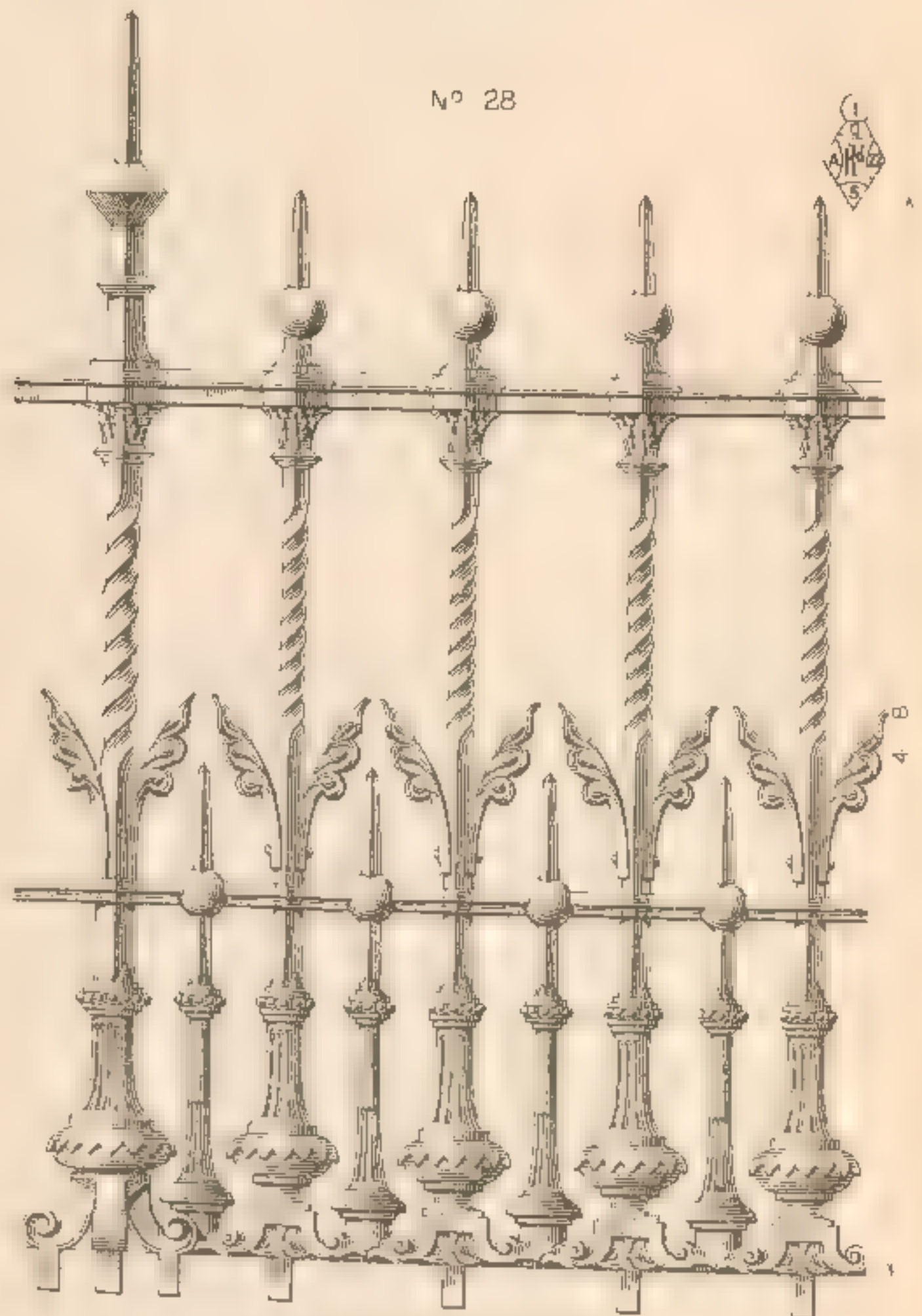


Nº 28



Standards charged extra.

Nº 28



Standards charged extra.

SCALE 1 INCH = 1 FOOT

MACFARLANE'S BALUSTERS AND STAIR RAILING.

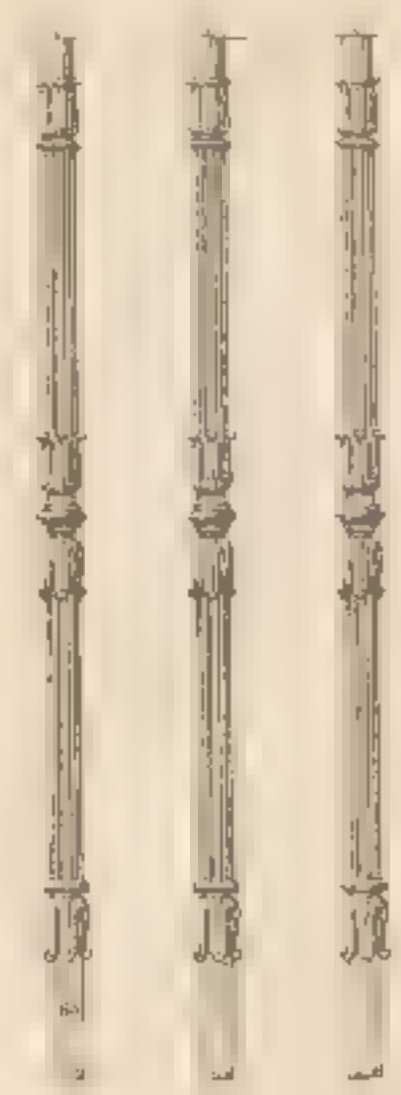
No 475



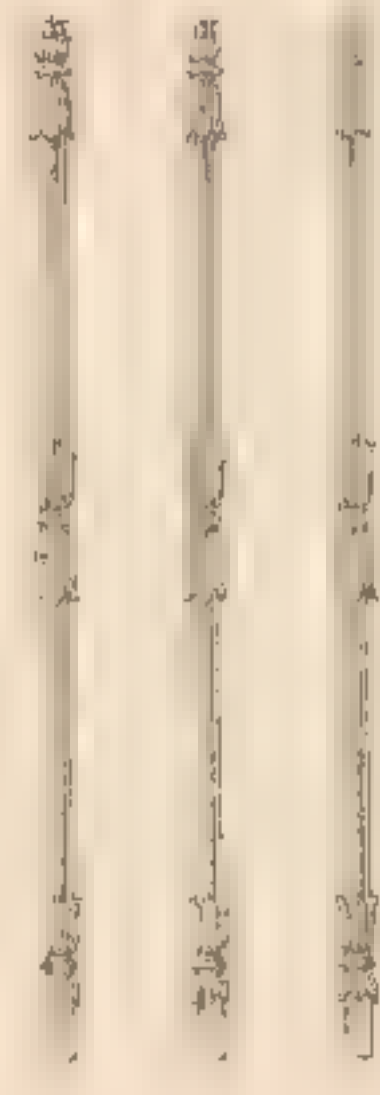
No 476



No 477



No 479

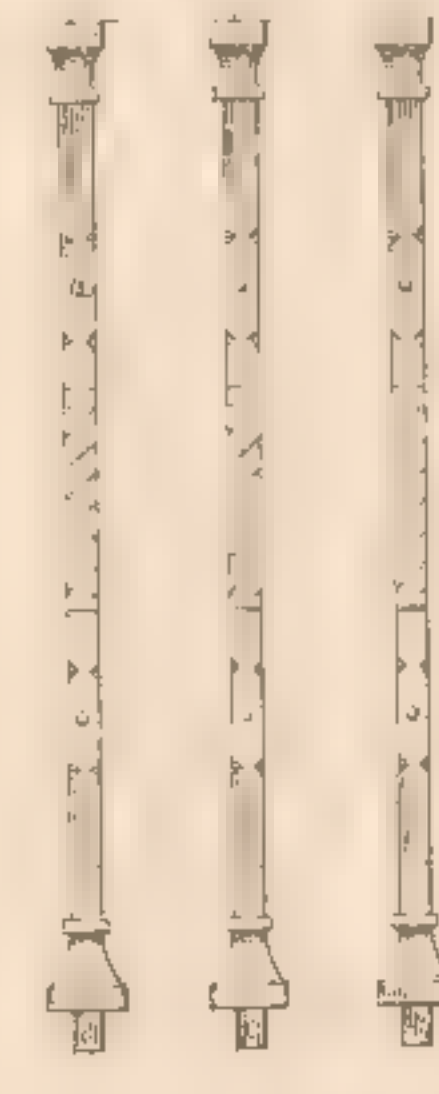


See for No 580 page 373

No 483



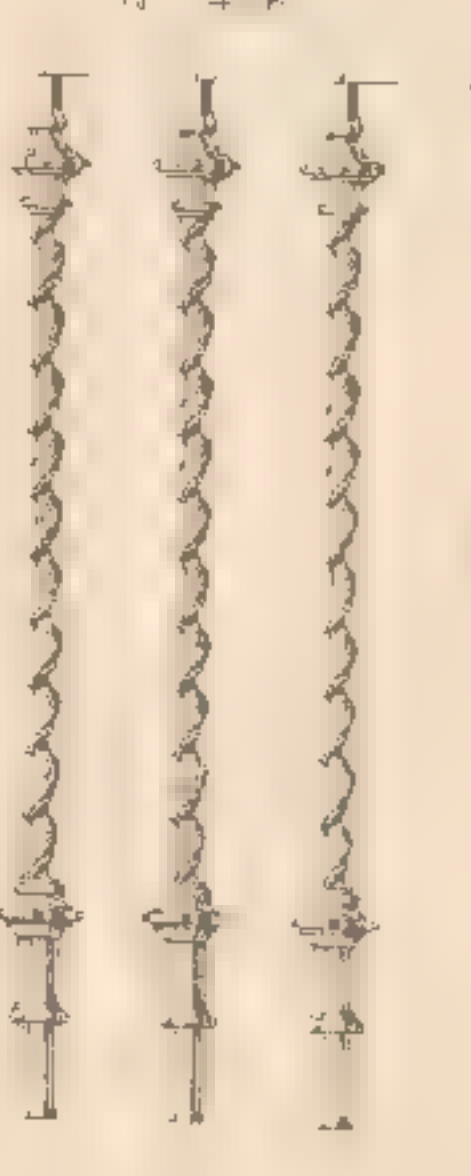
No 484



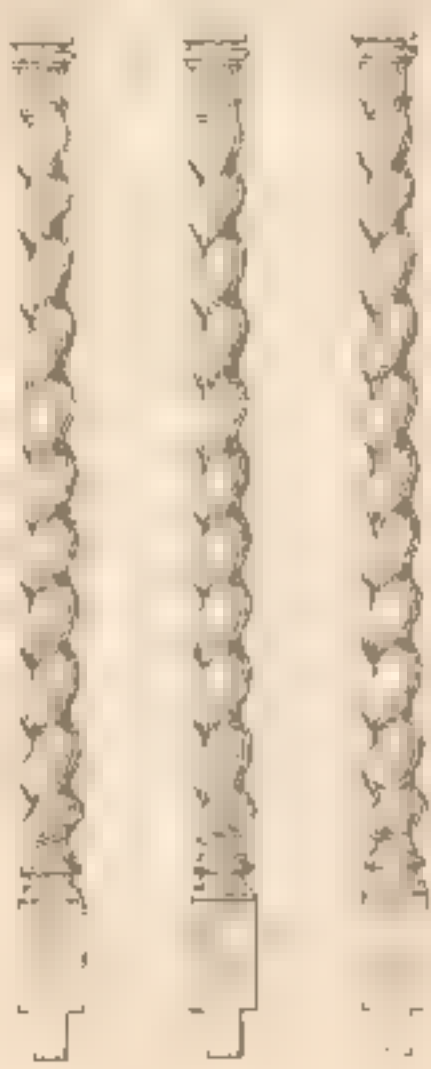
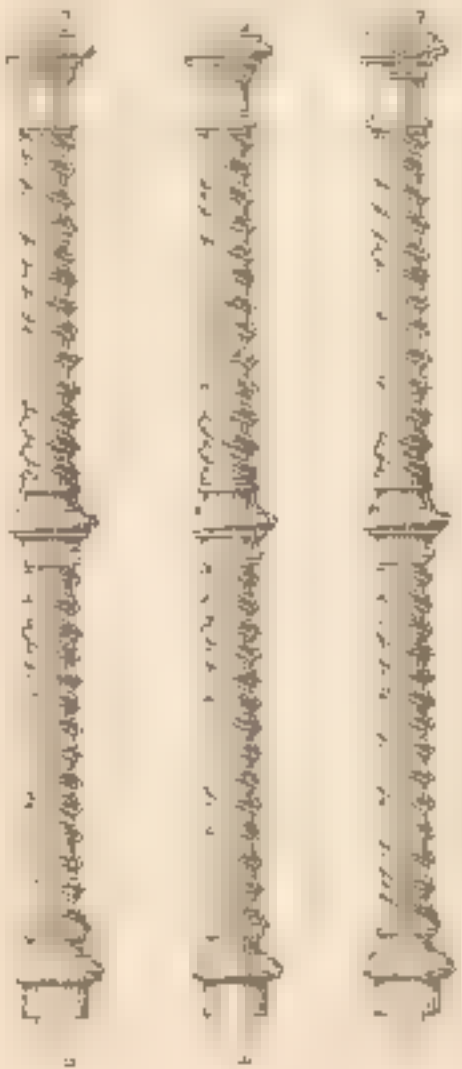
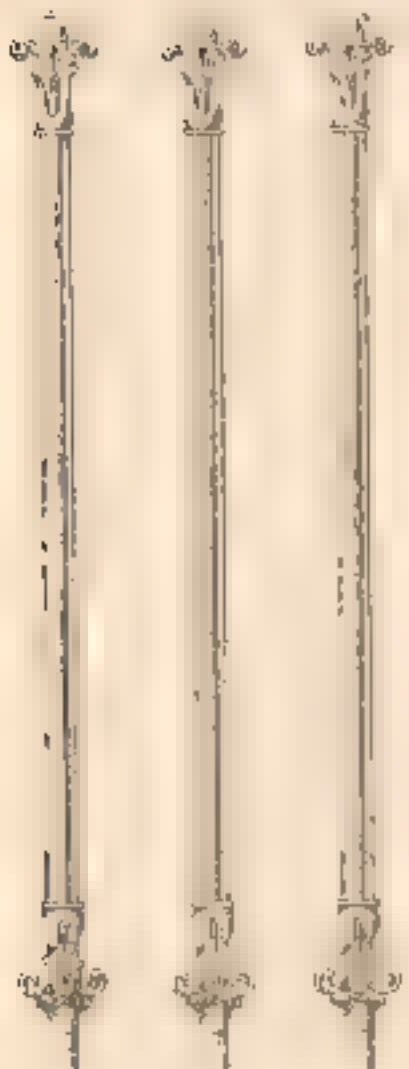
No 485



SCALE 1 INCH =



MACFARLANE'S BALUSTERS AND STAIR RAILING



ROD FOR N^o 577 PAGE 370 & 583 PAGE 37

N^o 507



N^o 508



ROD FOR N^o 552 PAGE 368

SCALE 1 INCH = FOOT

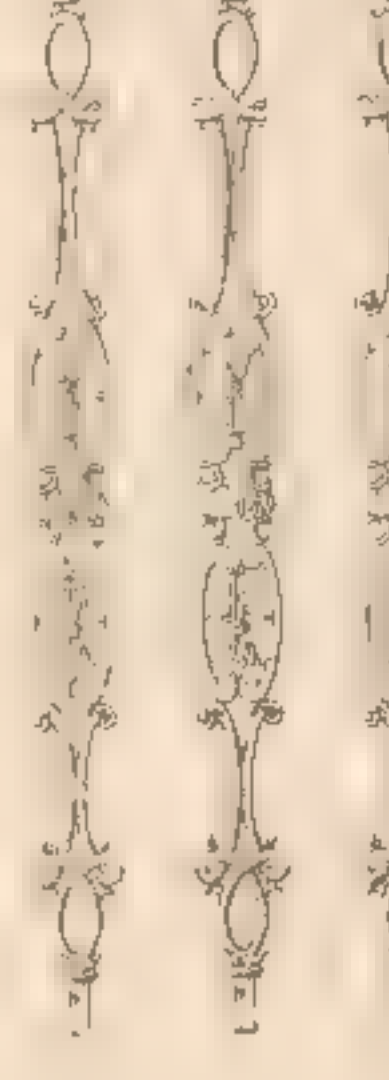
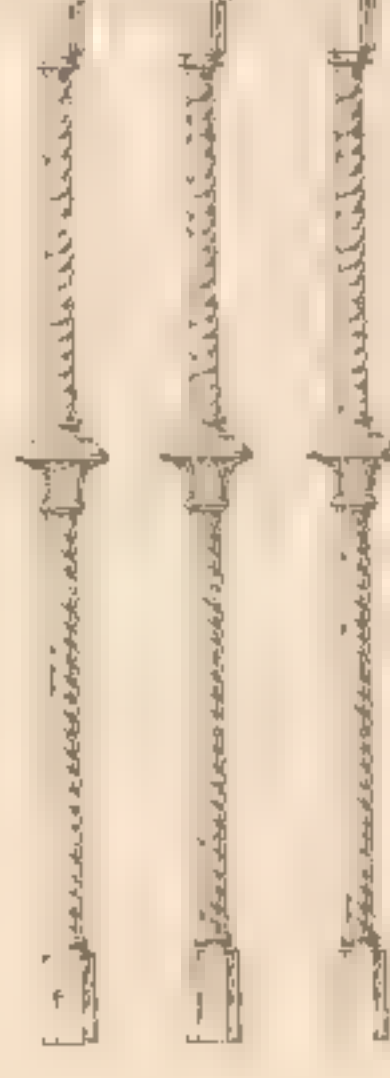
MACFARLANE'S BALUS TREES AND STAR RAILING



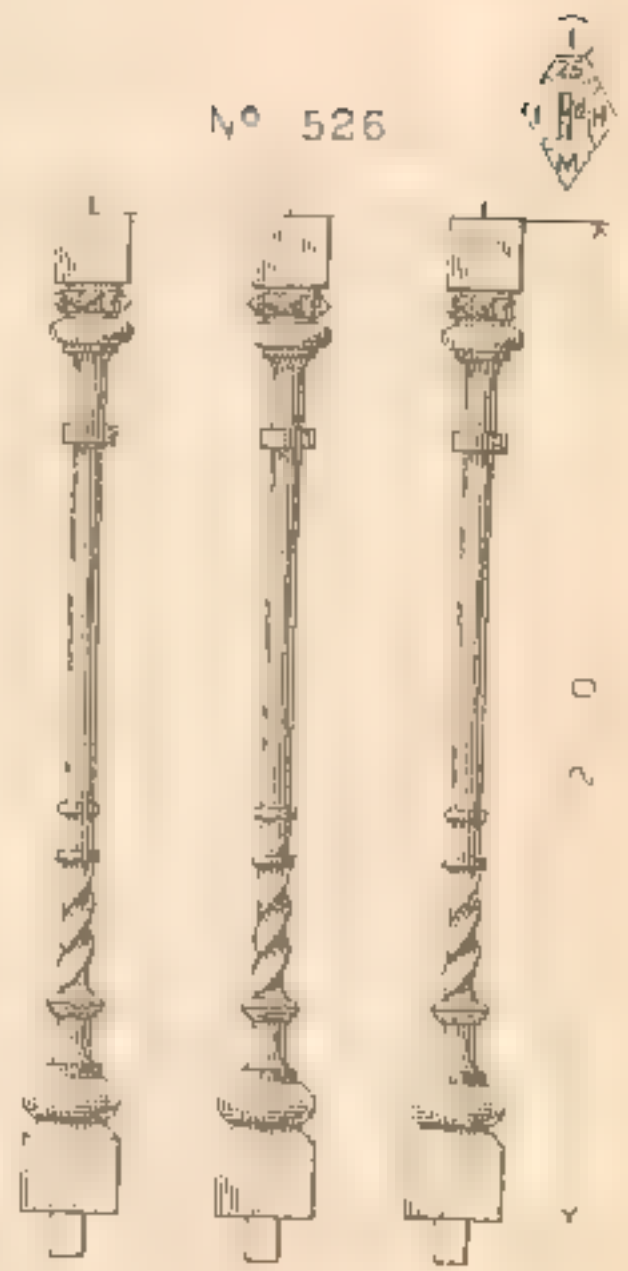
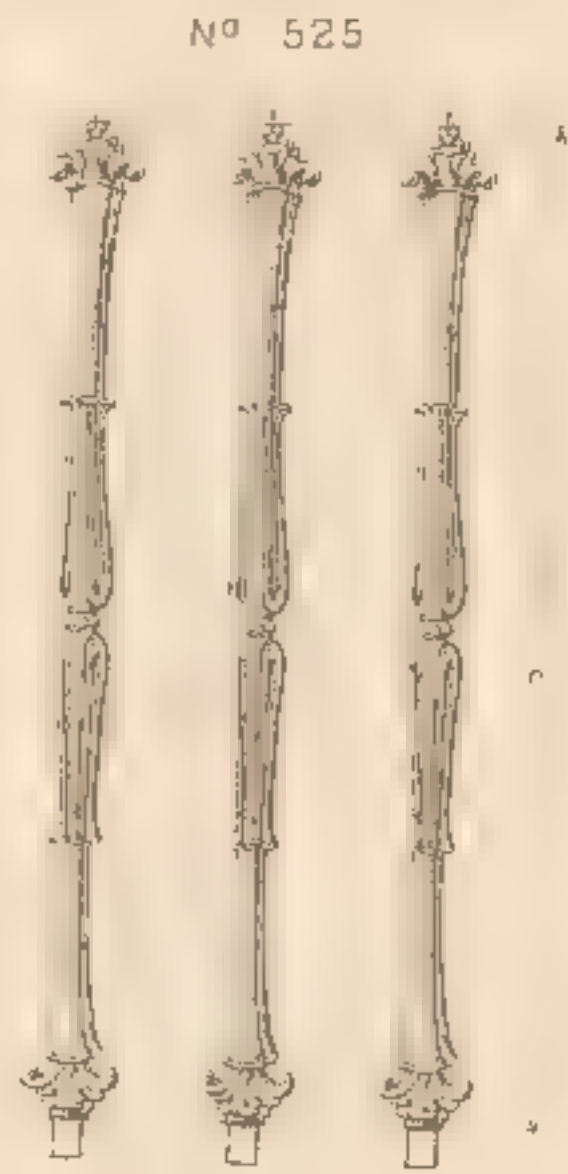
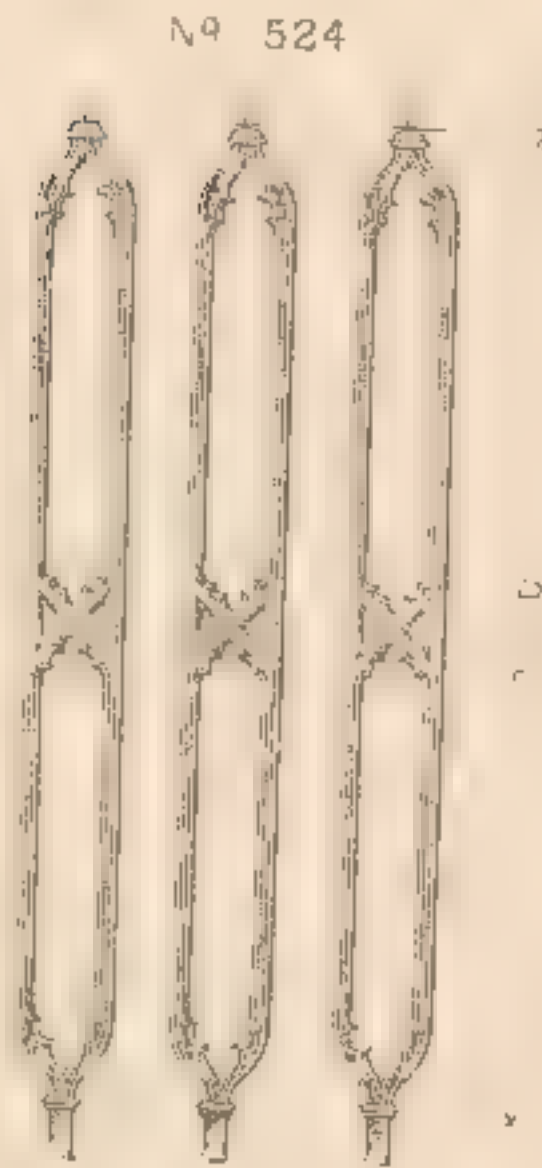
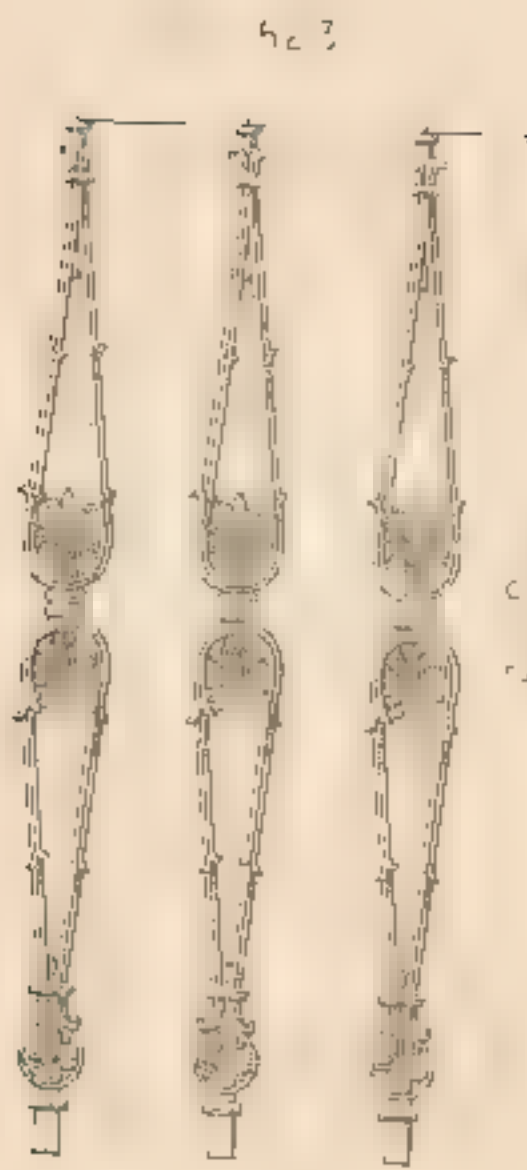
SCALE 1 INCH = FOOT



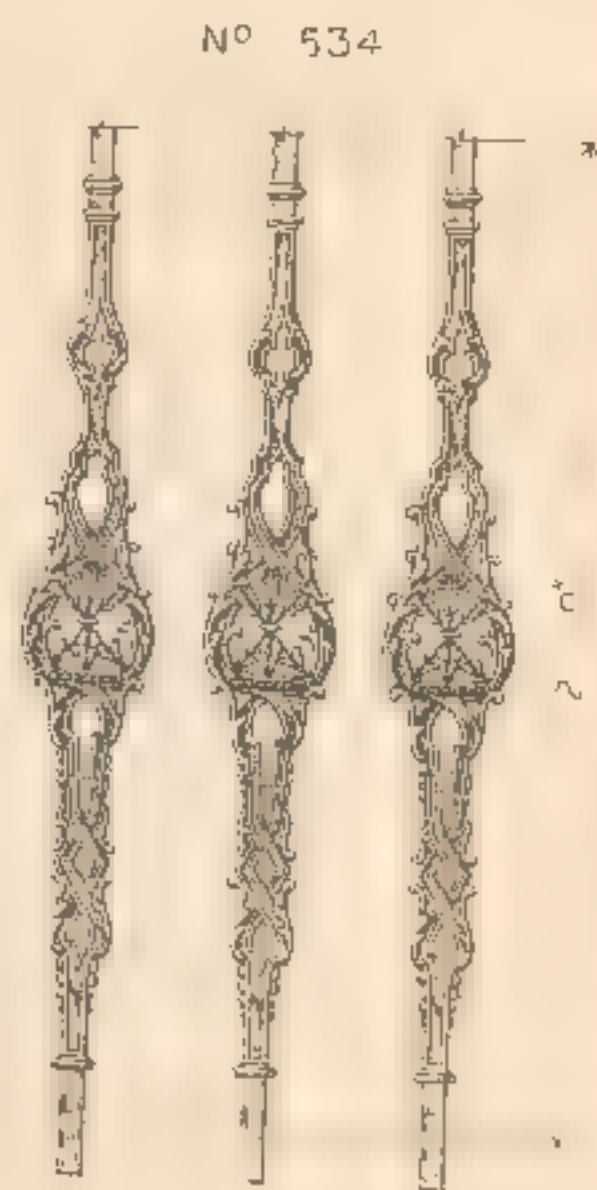
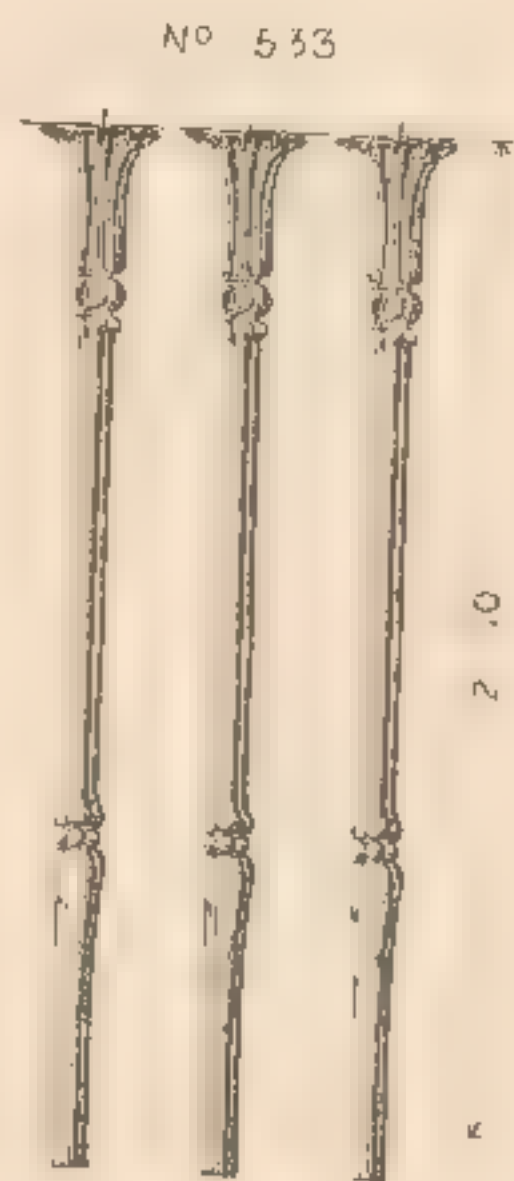
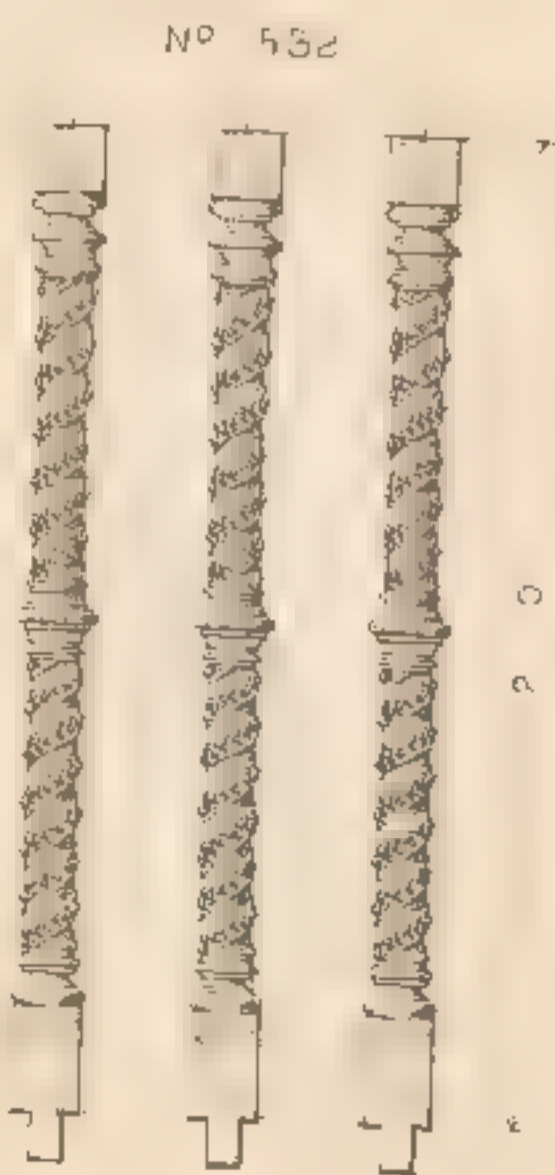
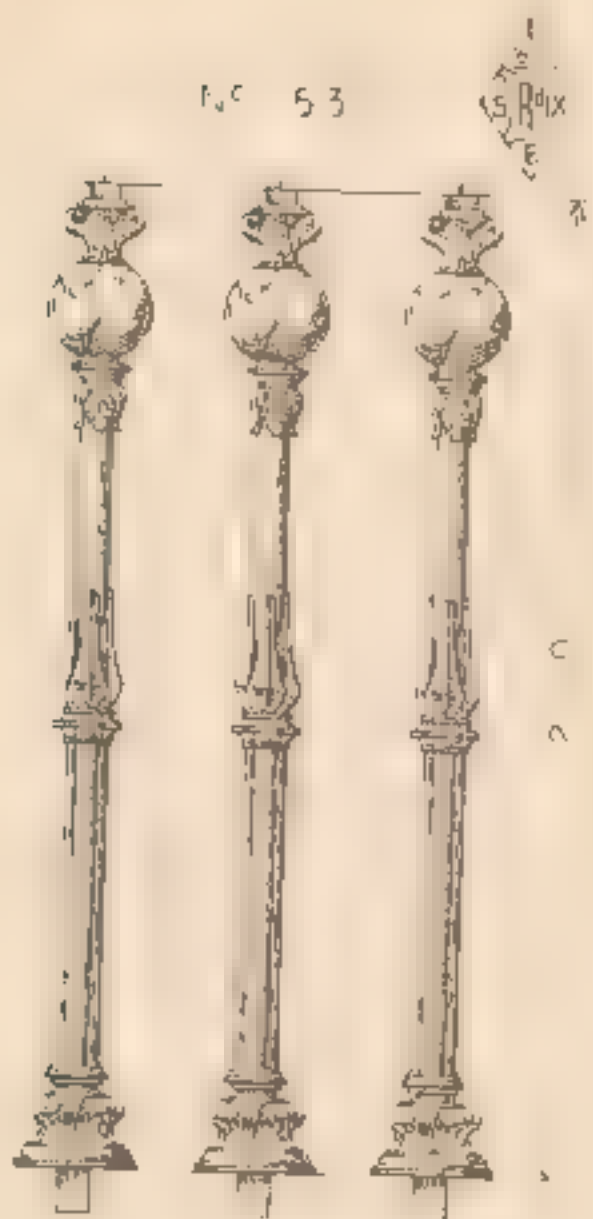
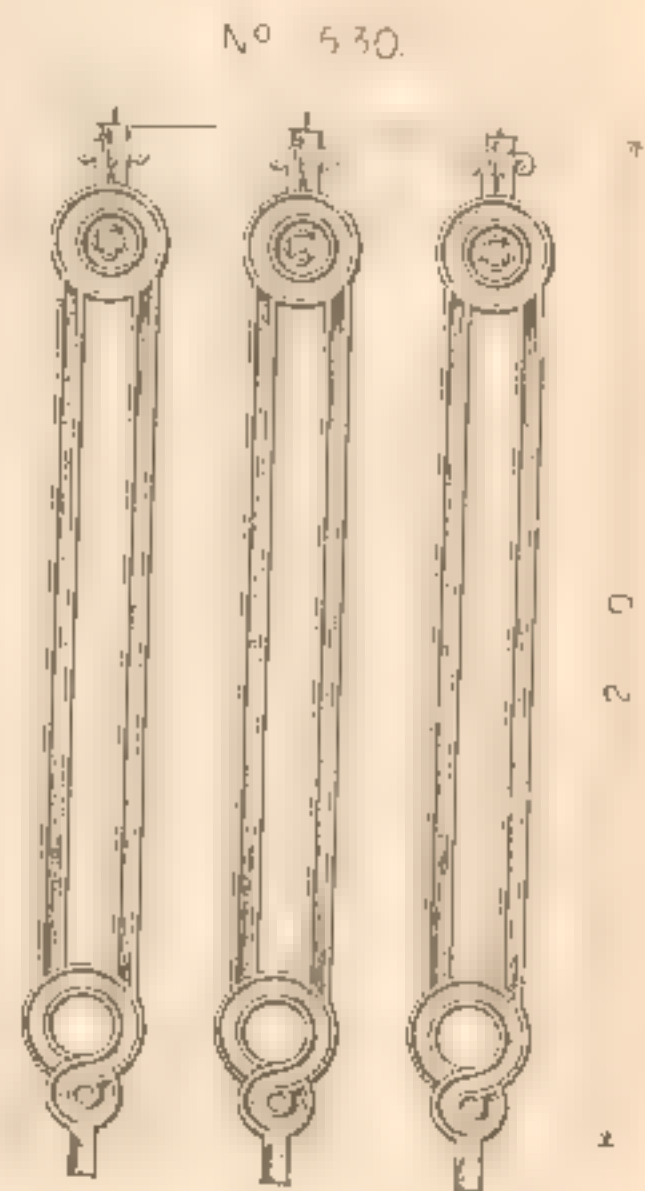
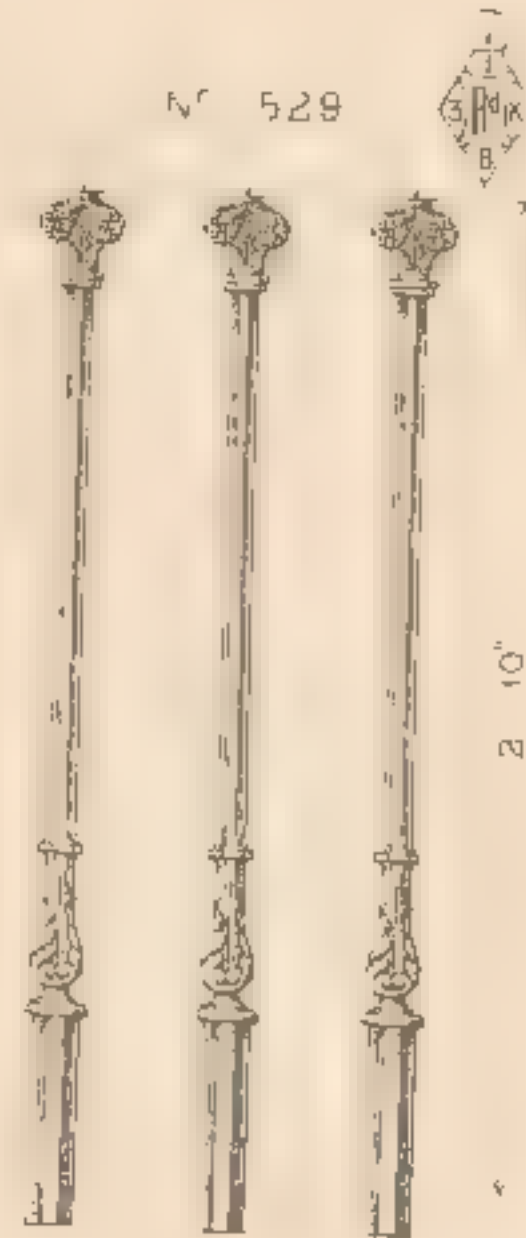
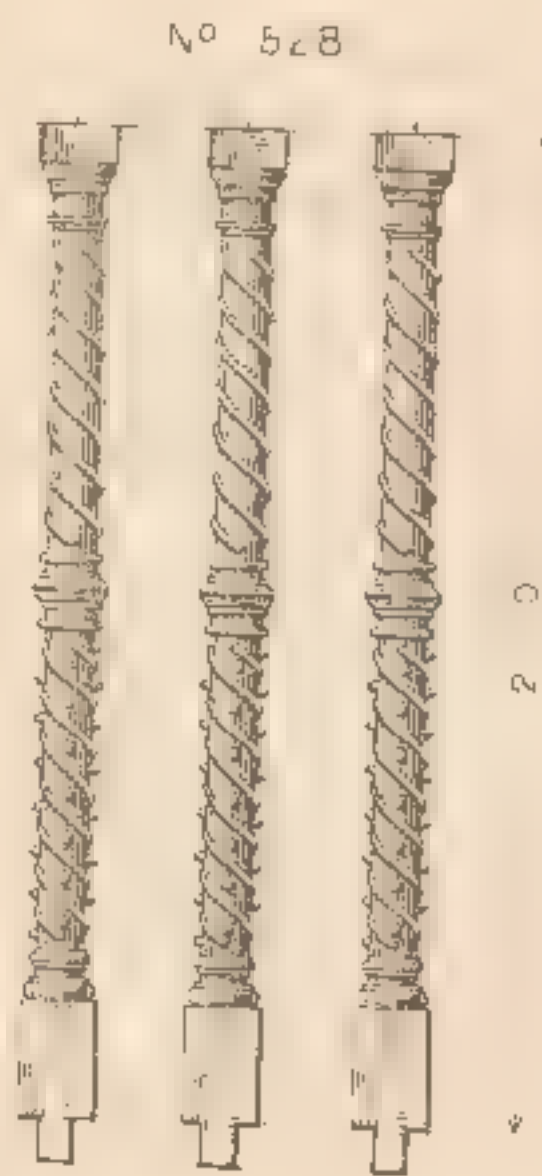
No 515



MACFARLANE'S BALUSTERS AND STAIR RAILING



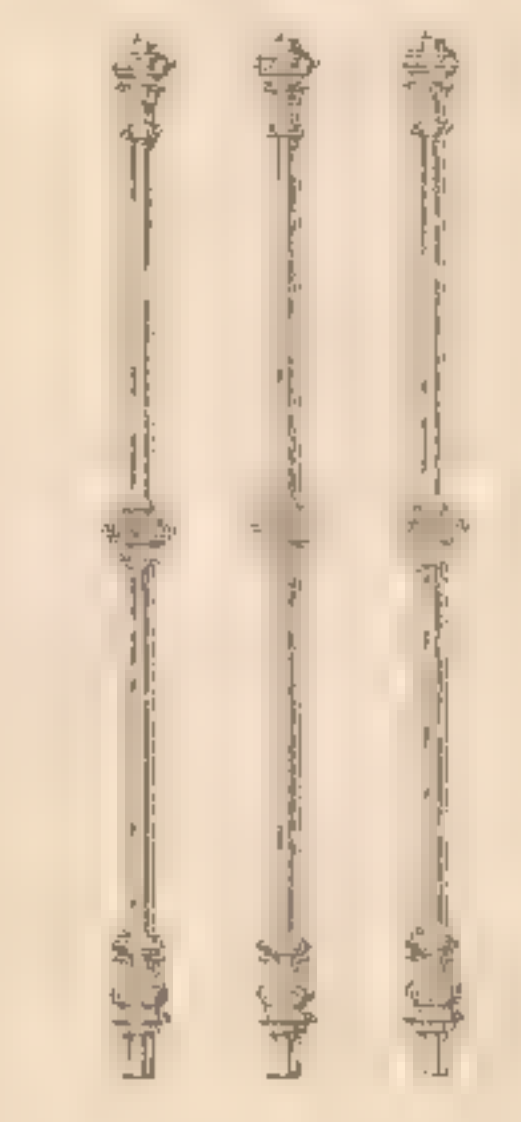
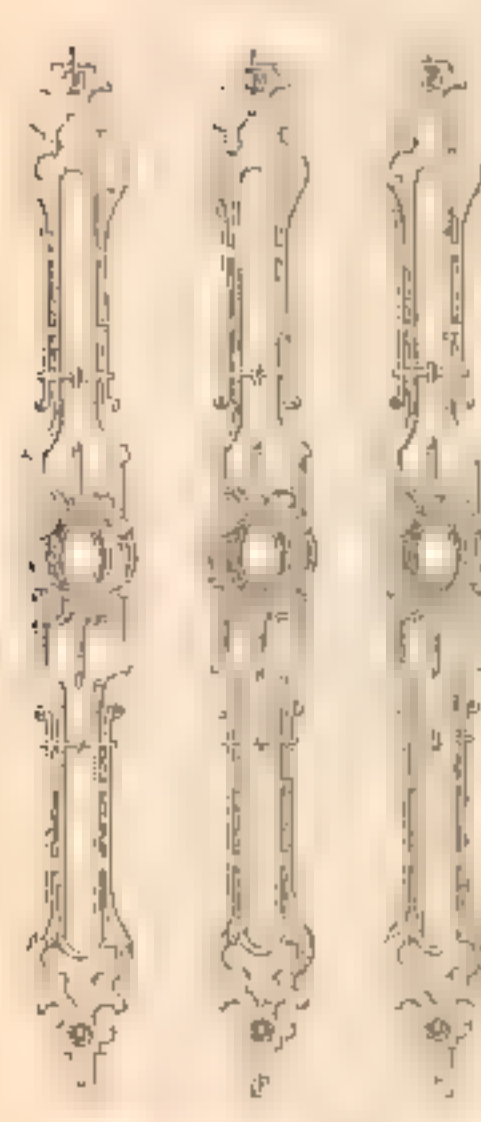
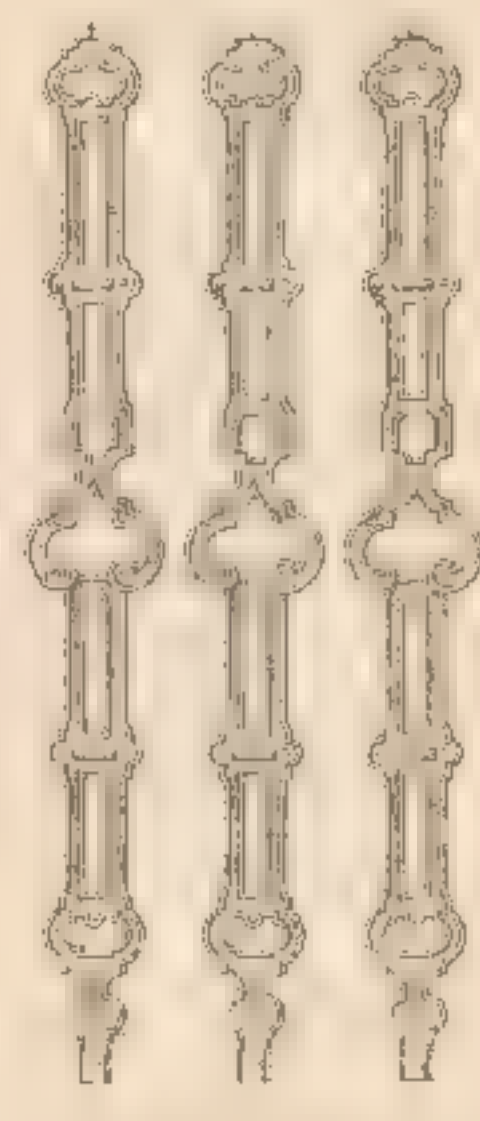
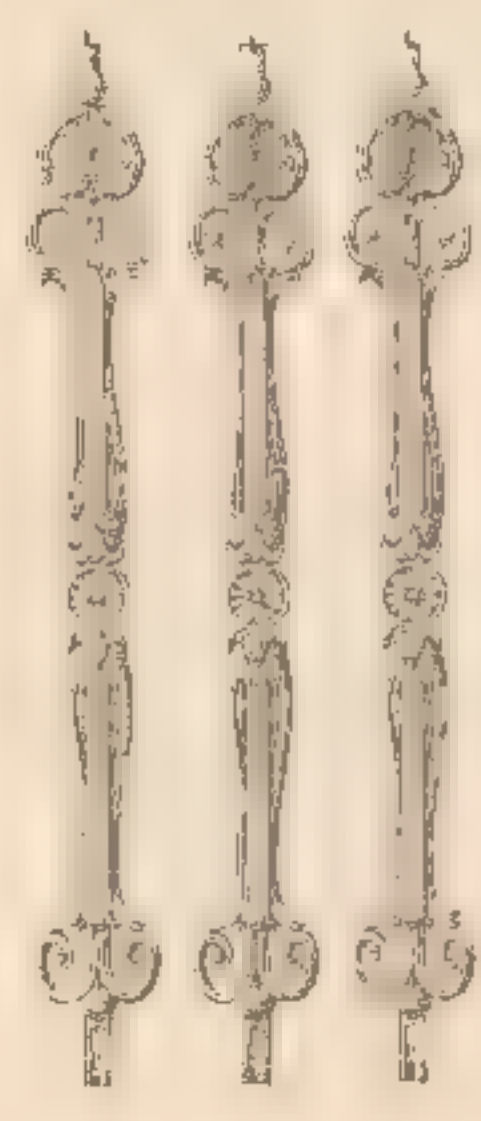
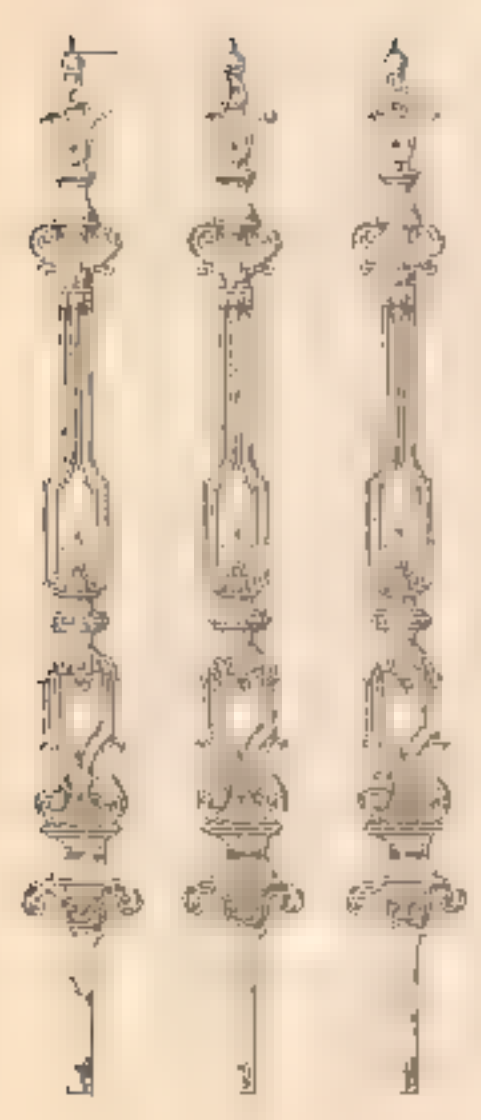
ROD FOR N° 528 PAGE 375



ROD FOR N° 534 PAGE 372

SCALE 1 INCH = 1 FOOT

MACFARLANE'S BALUSTERS AND STAIR RAILING

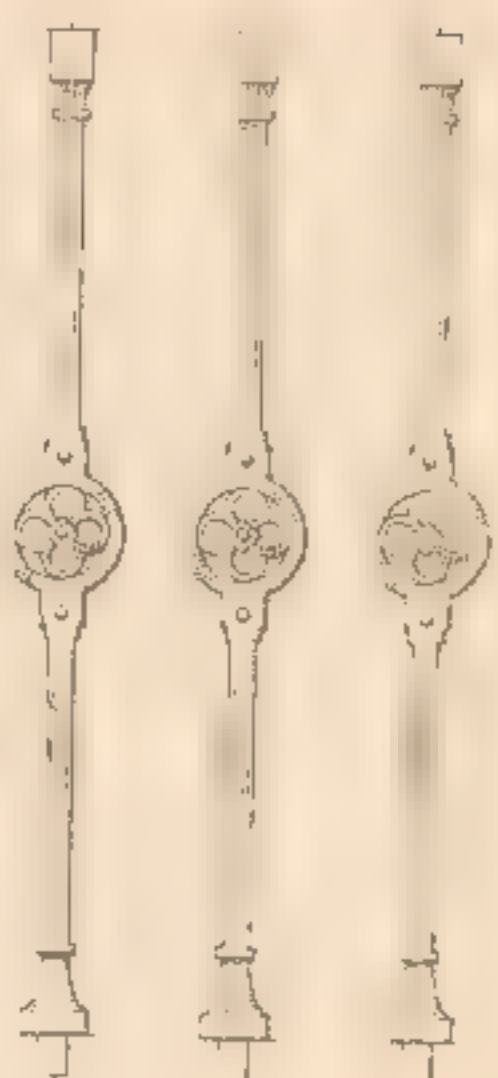
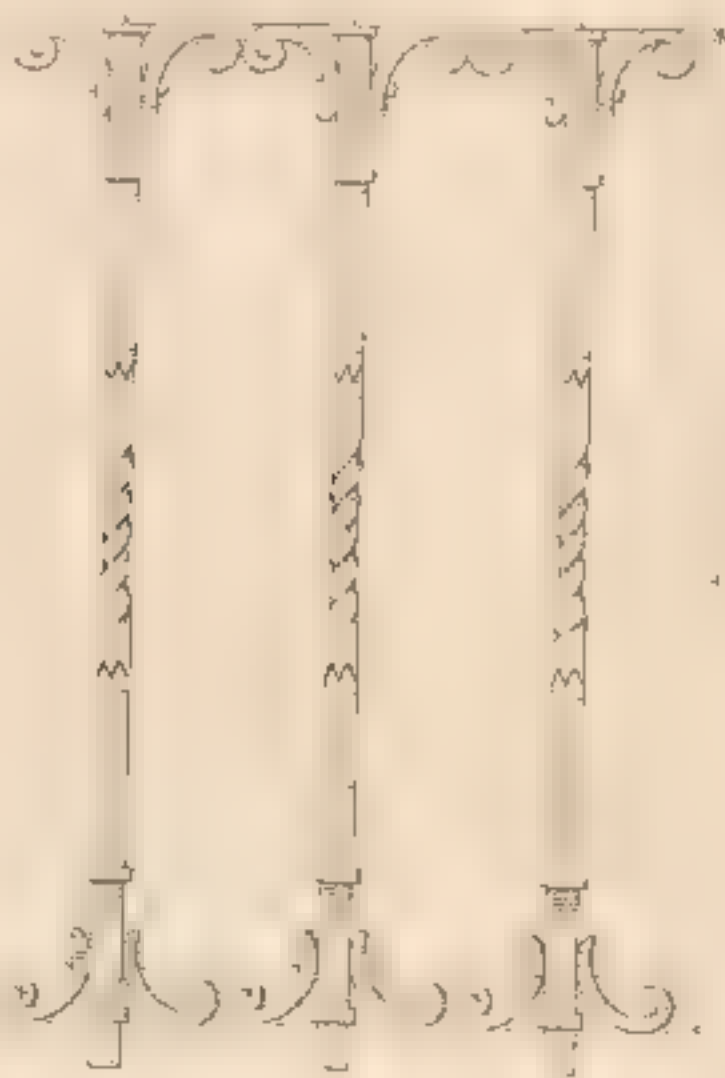


SCALE 1 INCH = 1 FOOT

MACFARLANE'S BALUSTERS AND STAIR RAILING.



No 548



No 549



No 550



No 551



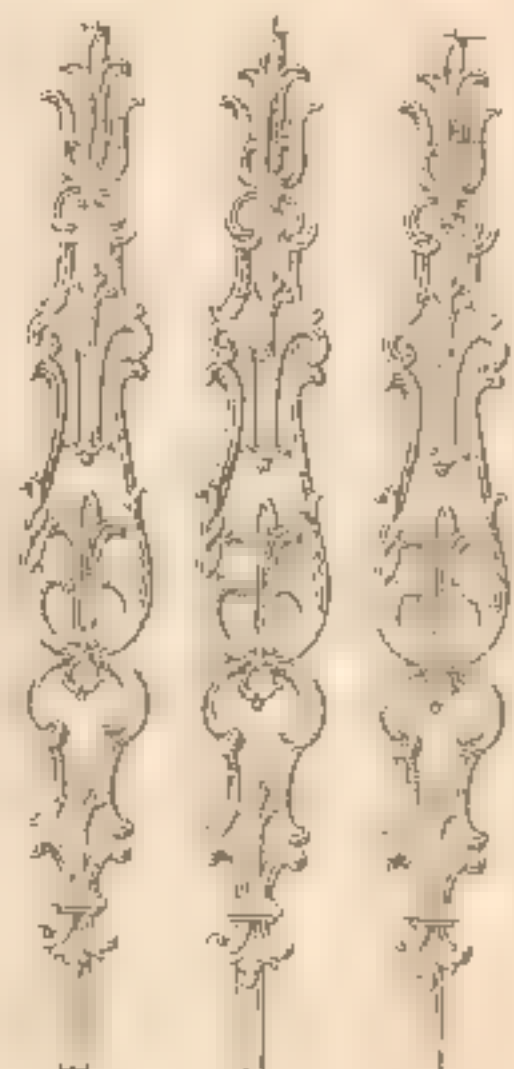
No 552



No 553



No 554



MACFARLANE'S BALUSTERS AND STAIR RAILING

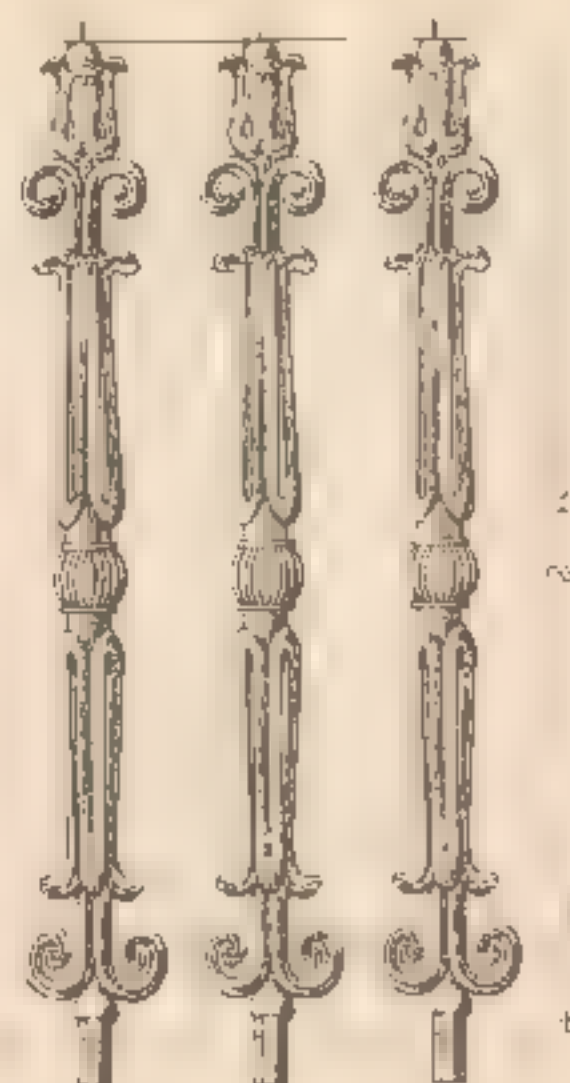
Nº 556



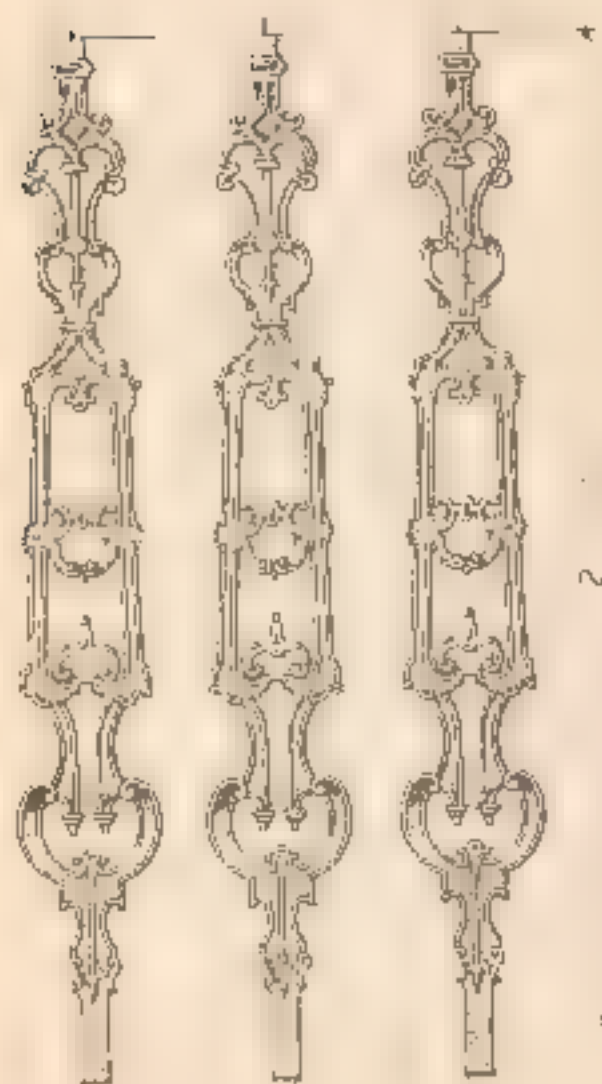
Nº 557



Nº 558



Nº 559



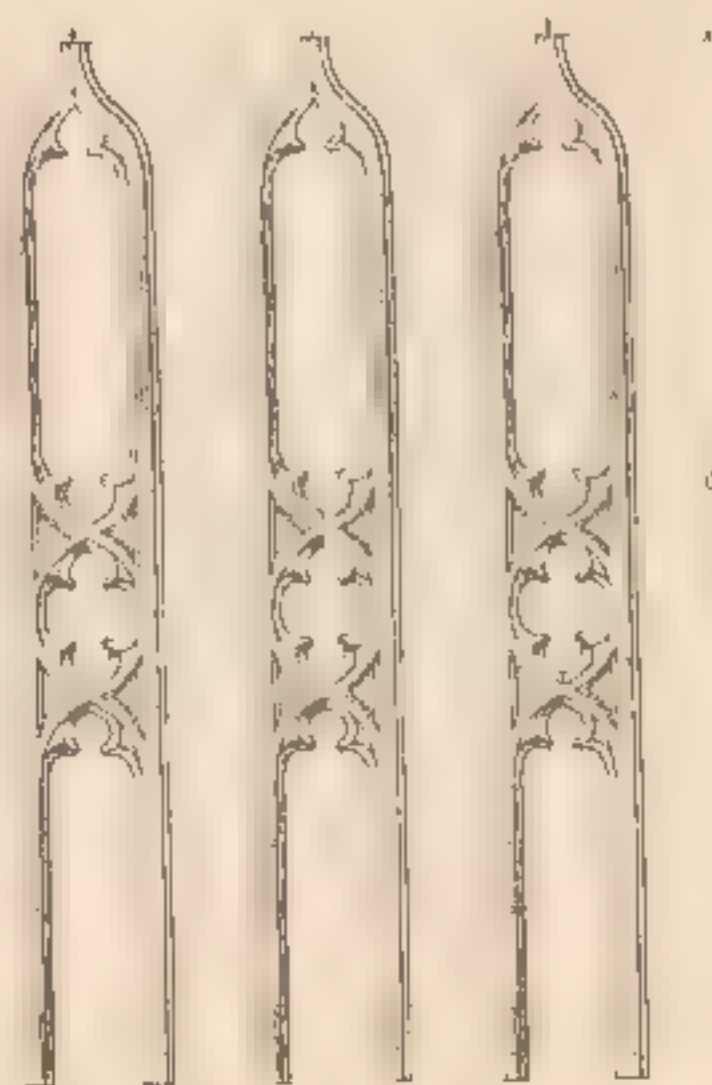
FOR ROD SEE Nº PAGE 364

Nº 560



FOR ROD SEE Nº 9 PAGE 364

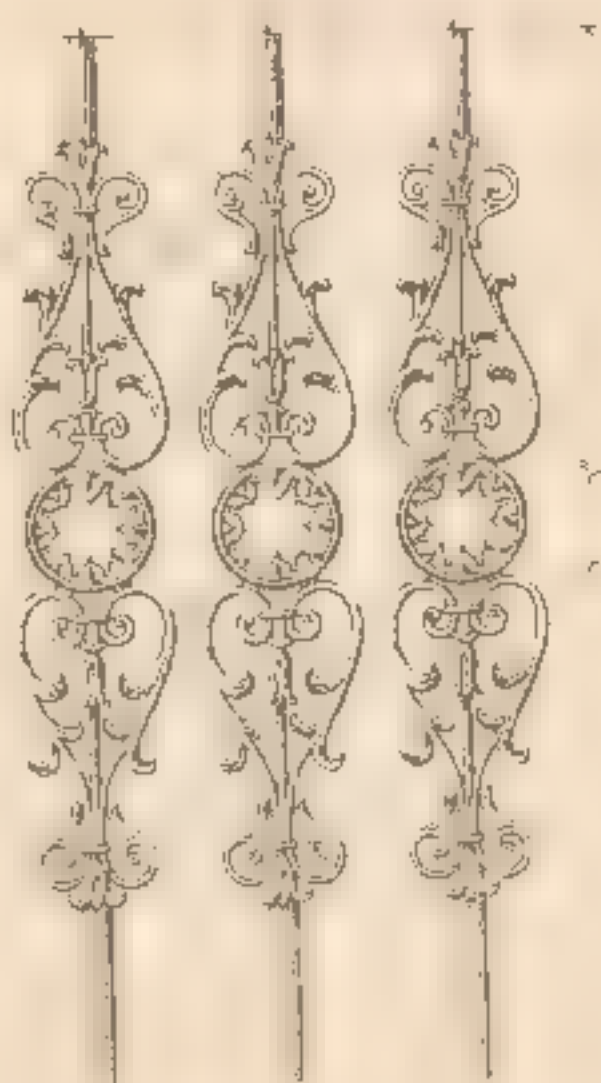
Nº 561



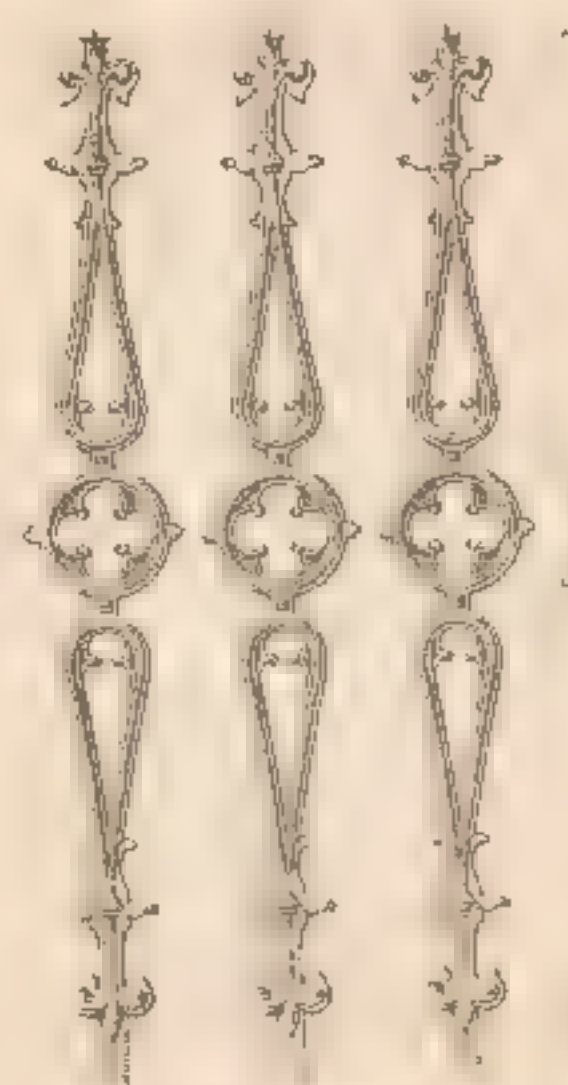
Nº 562



Nº 563

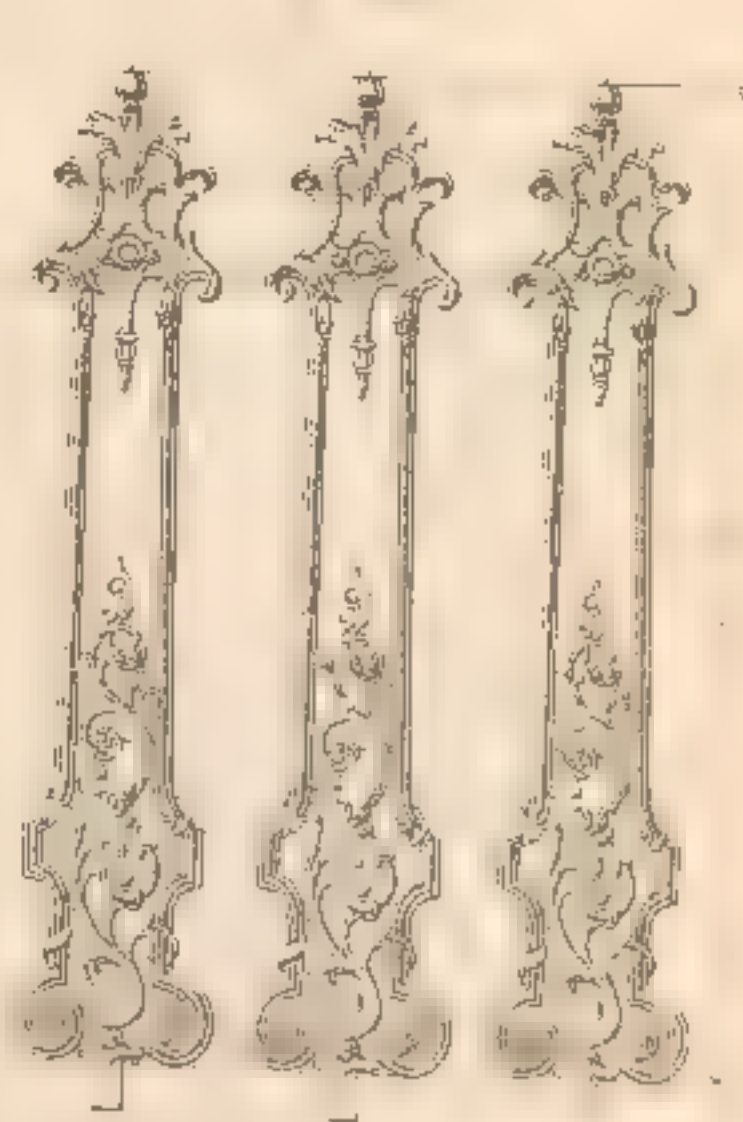
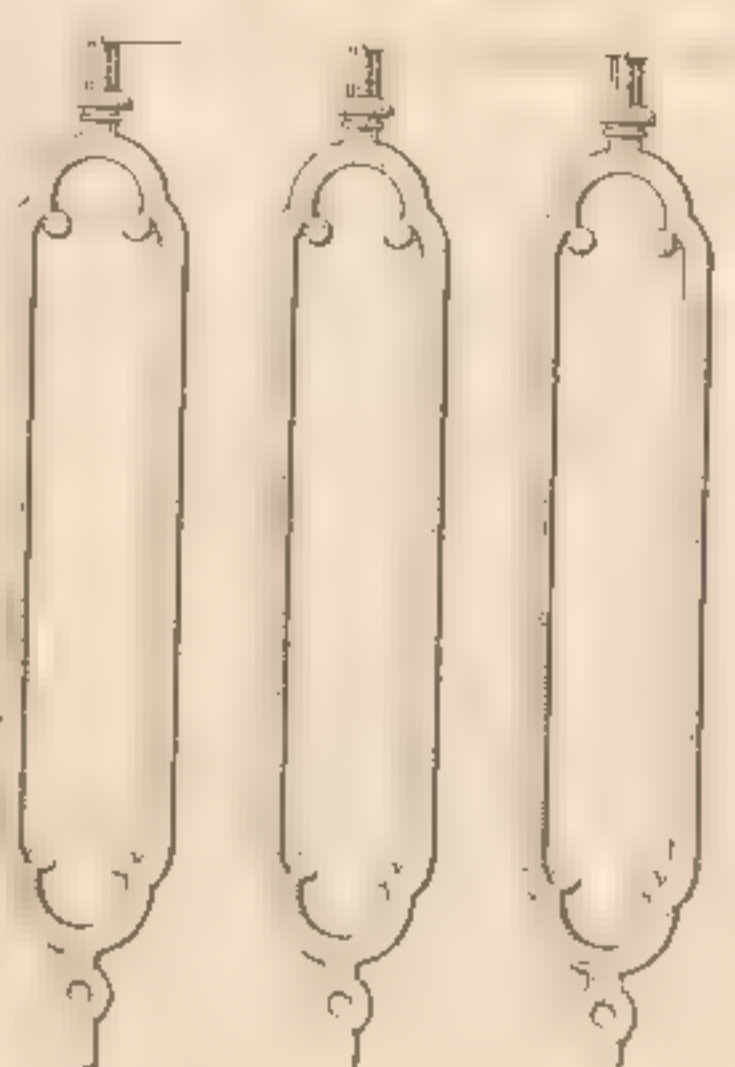
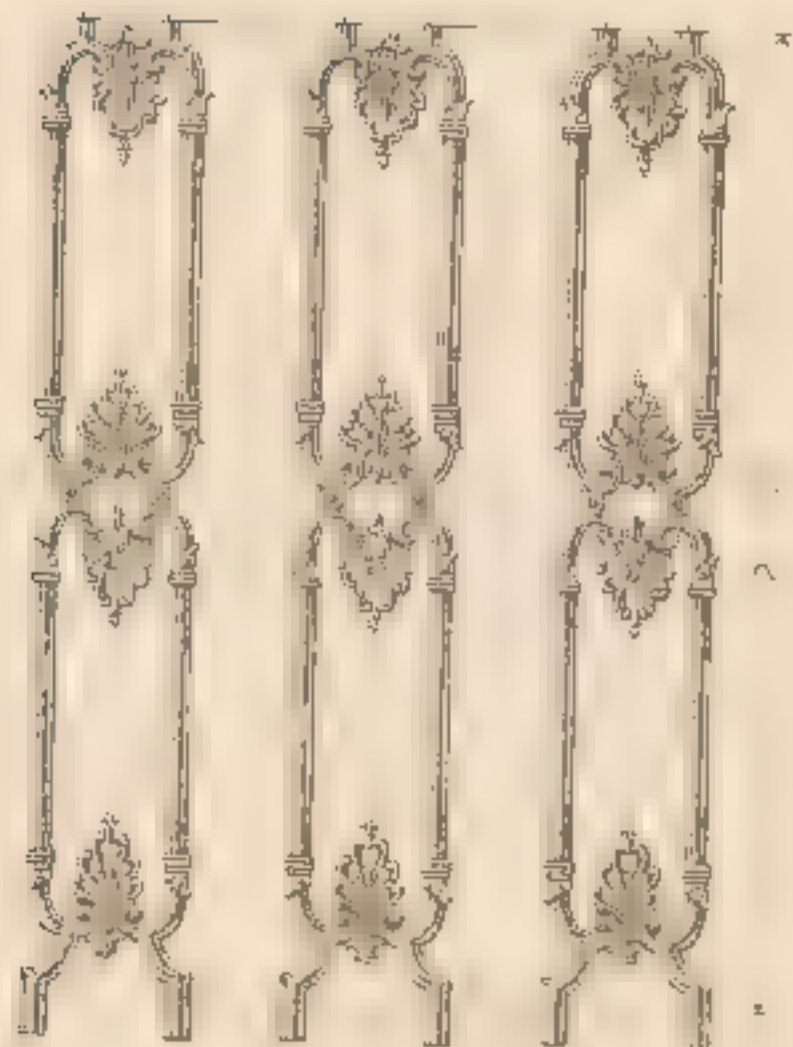
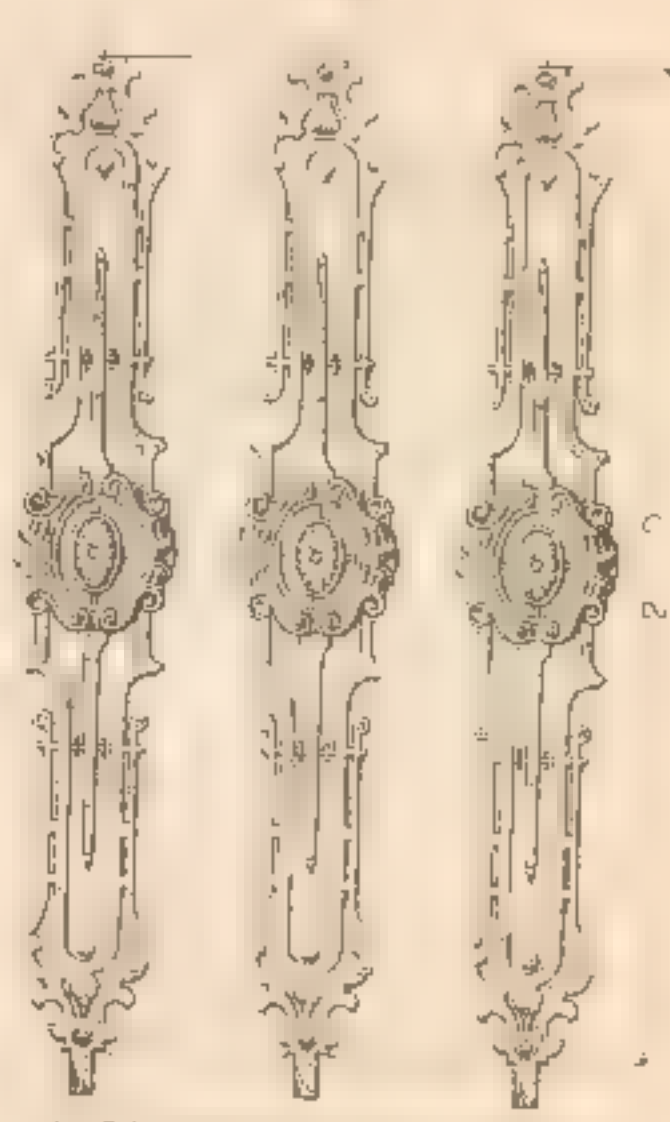
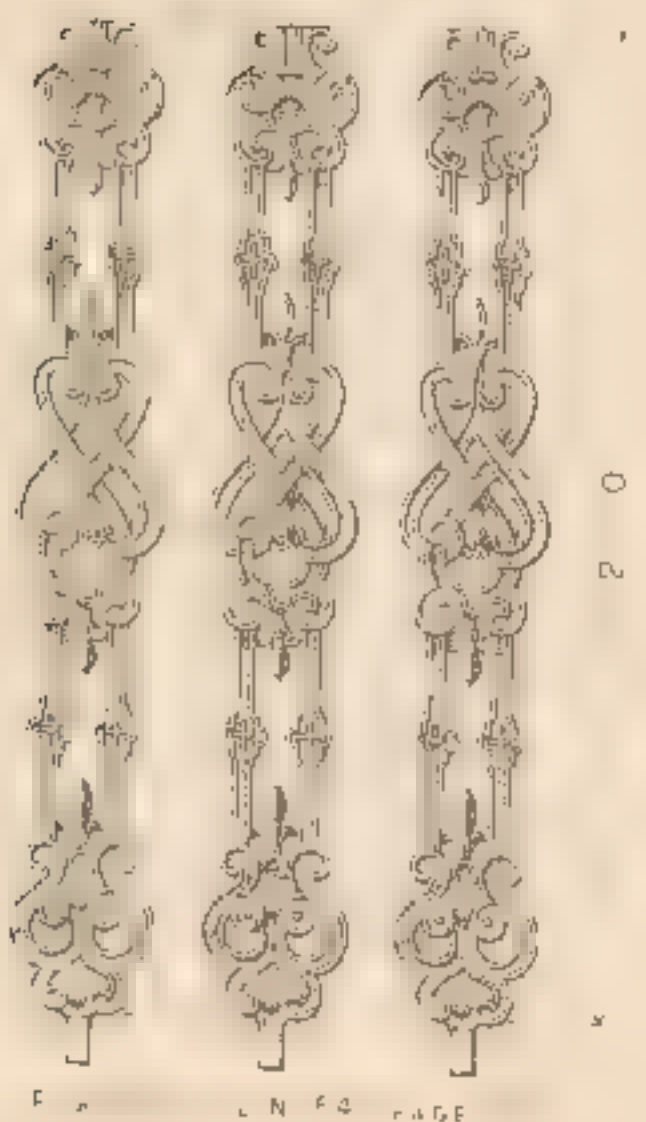
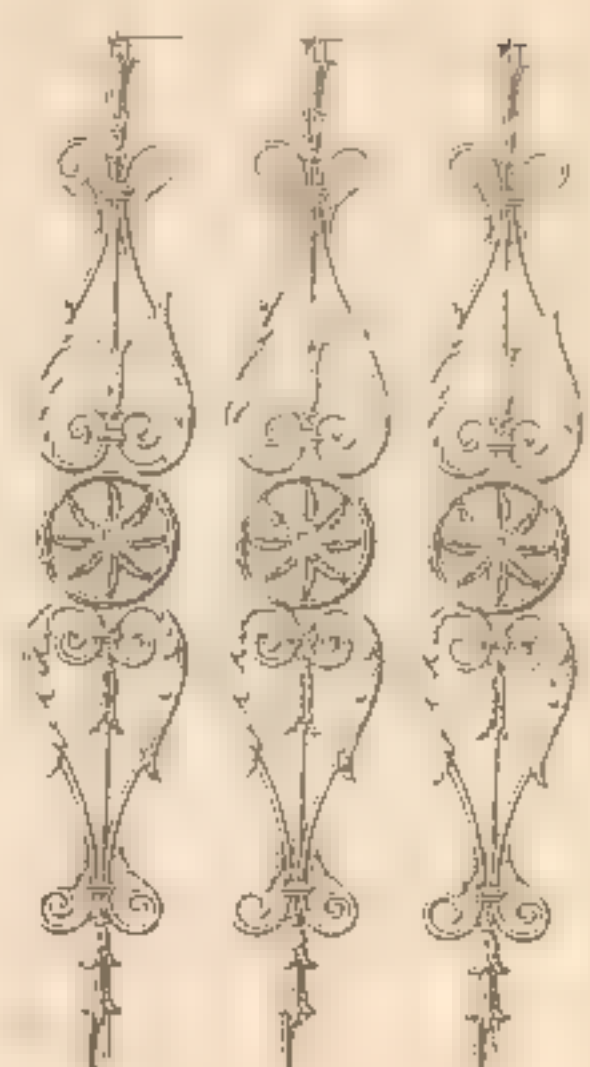
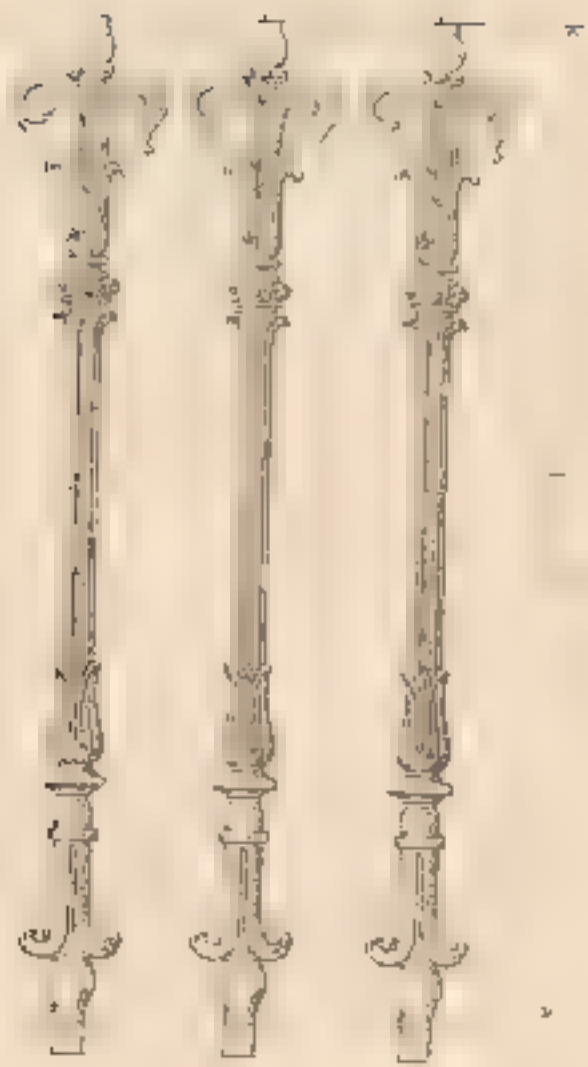


Nº 564



FOR L. EN. 11

MACFARLANES BALUSTERS AND STAIR RAILING



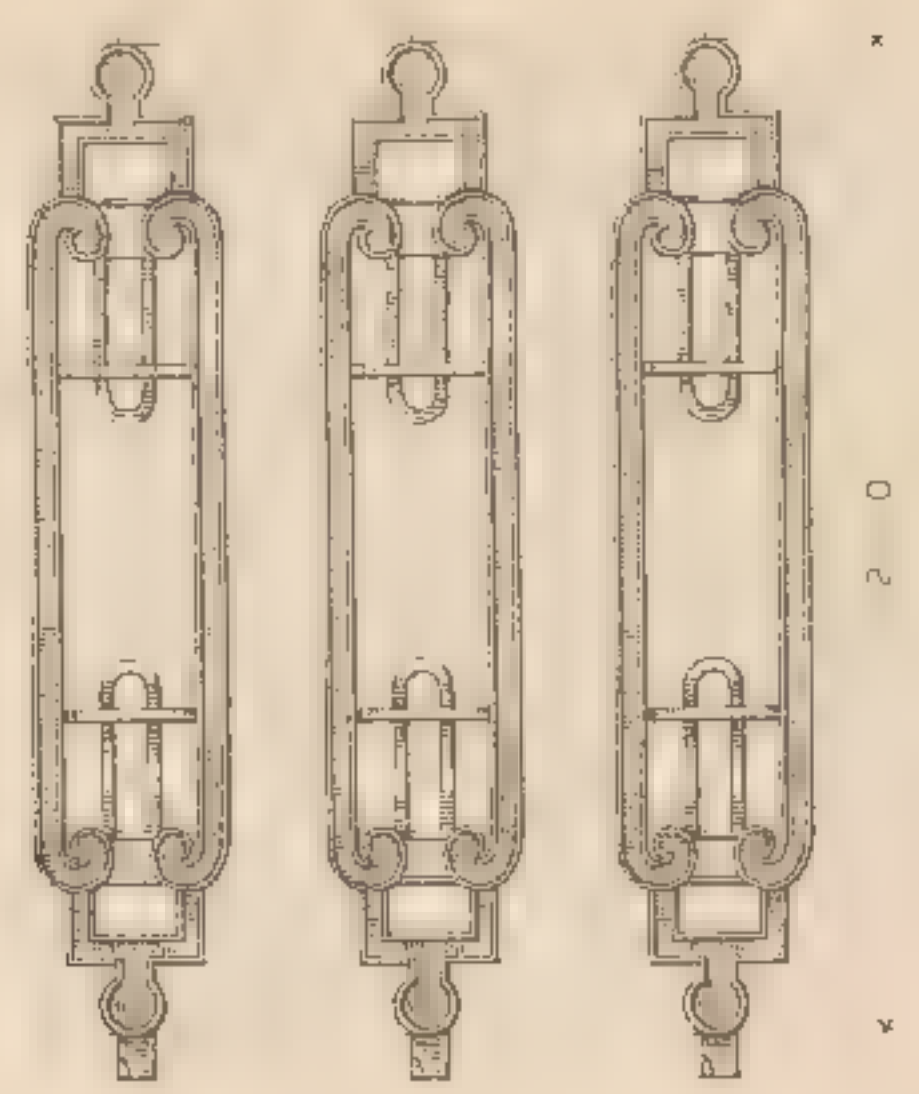
SCALE 1 INCH = 1 FOOT

MACFARLANE'S BALUSTERS AND STAIR RAILING

No 578



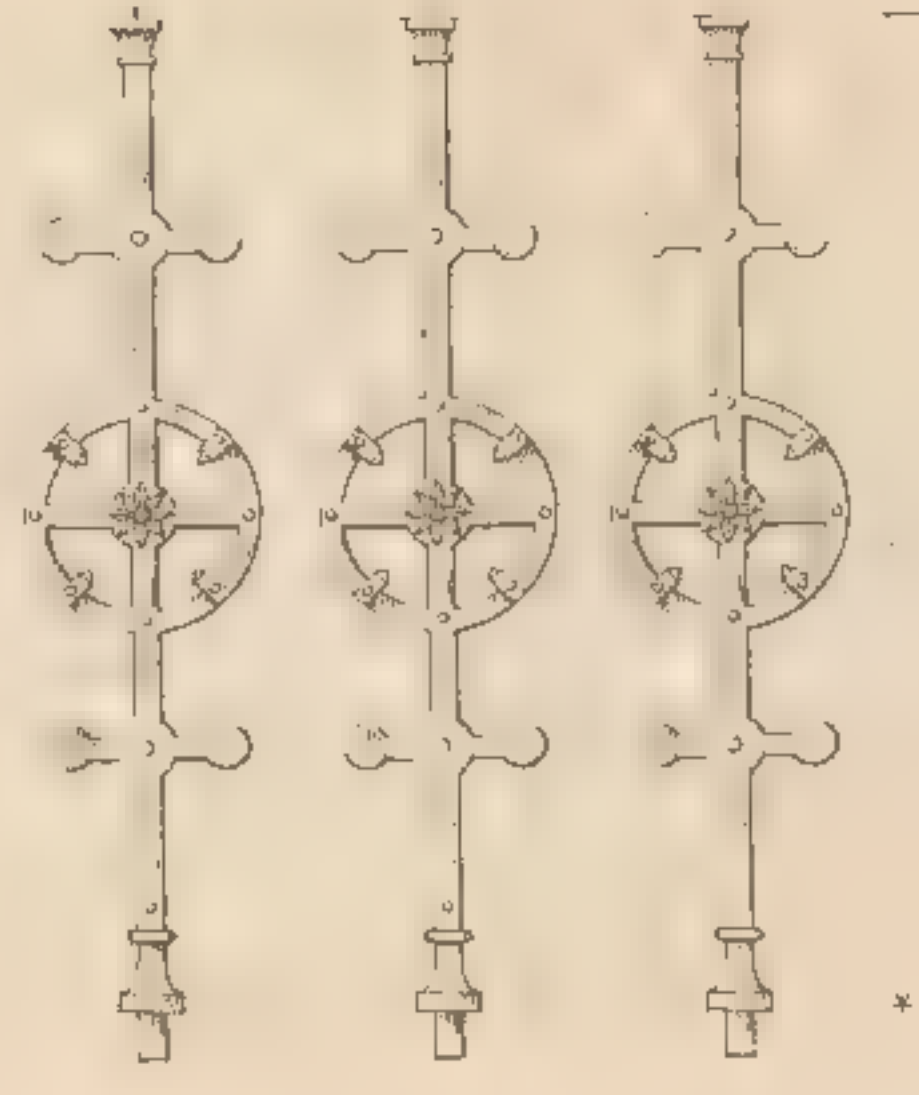
No 579



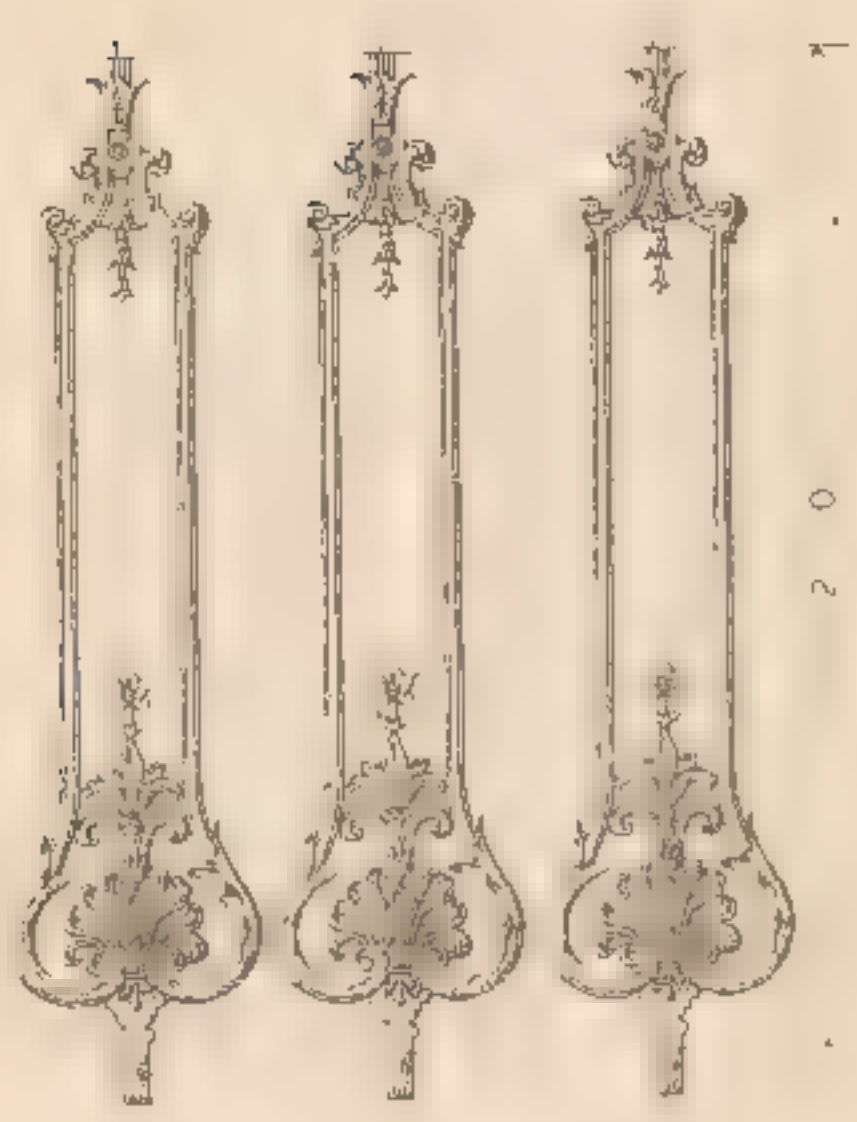
No 580



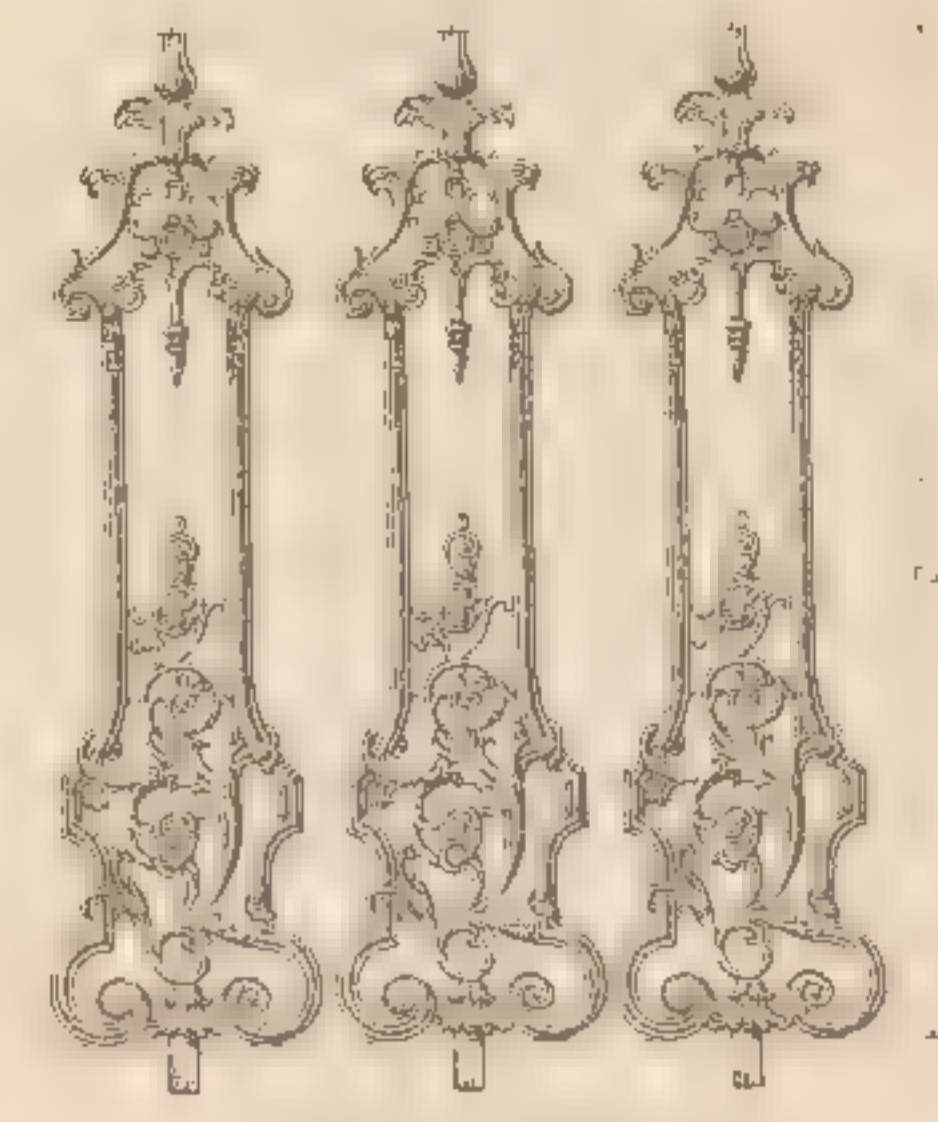
No 581



No 582



No 583



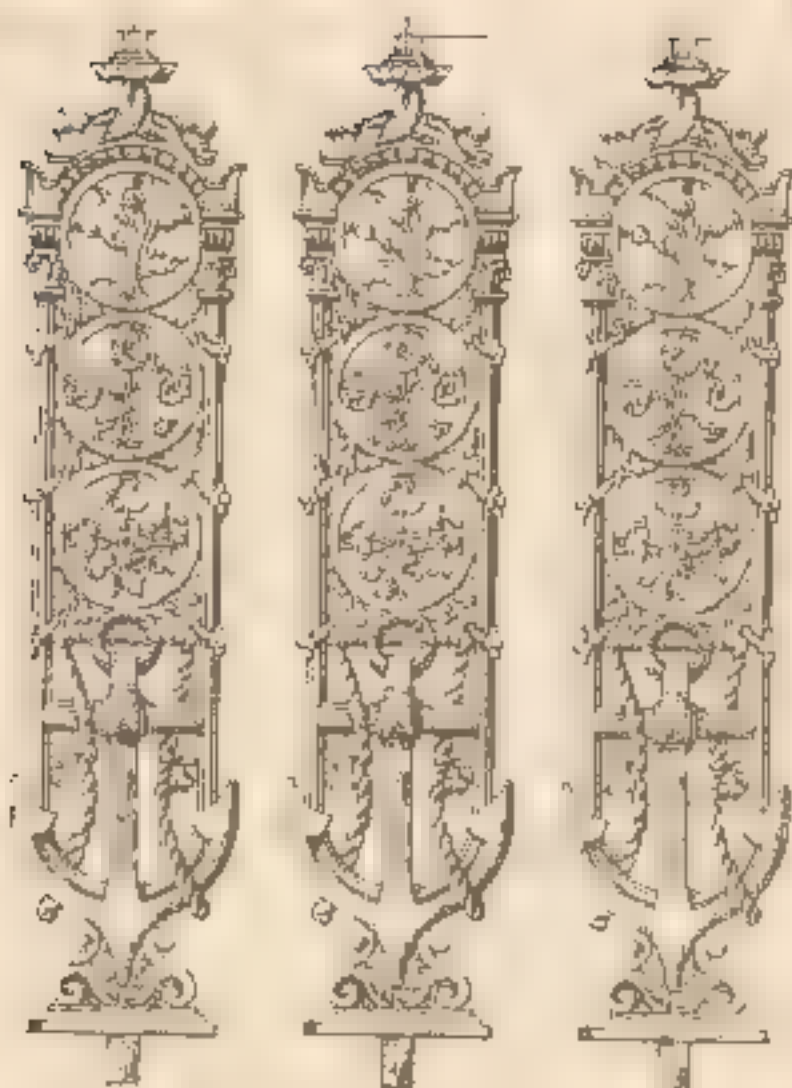
FOR E. S. L. N. F. 1863

SCALE INCHES

MACFARLANE'S BALUSTERS AND STAIR RAILING

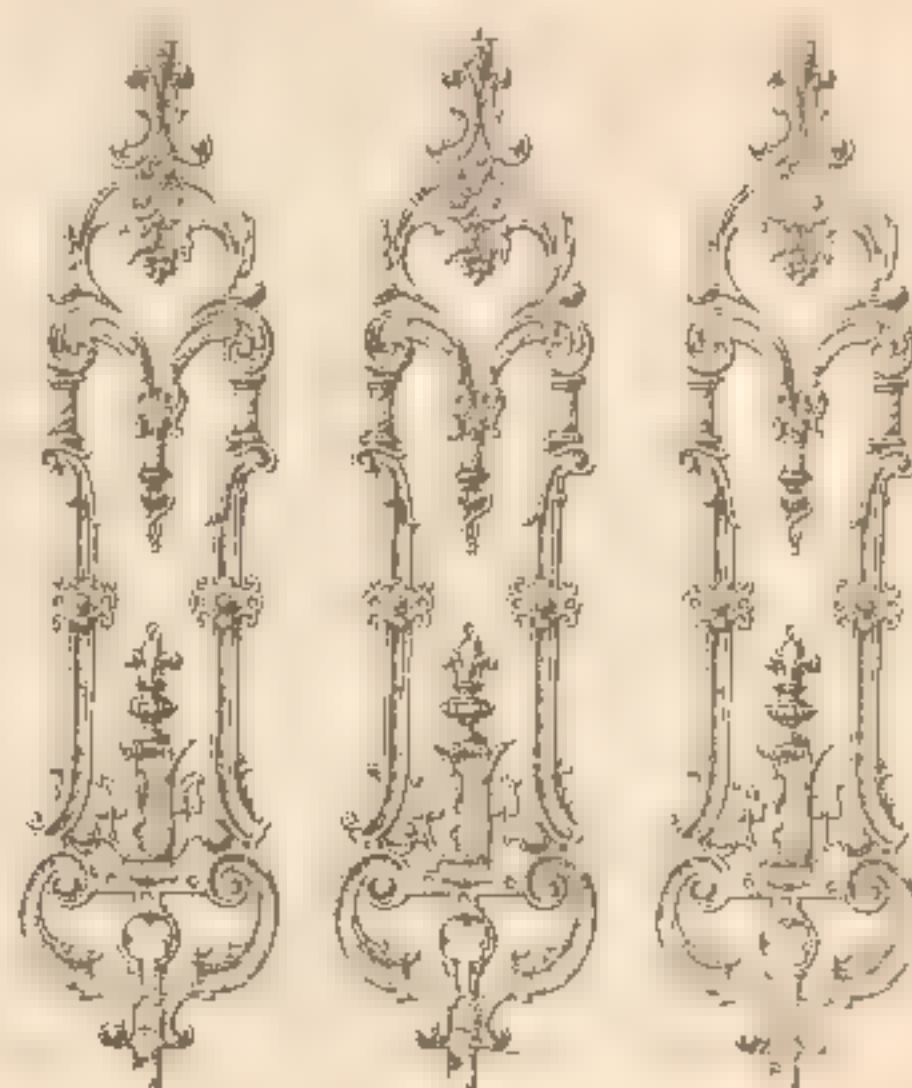
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No. 545

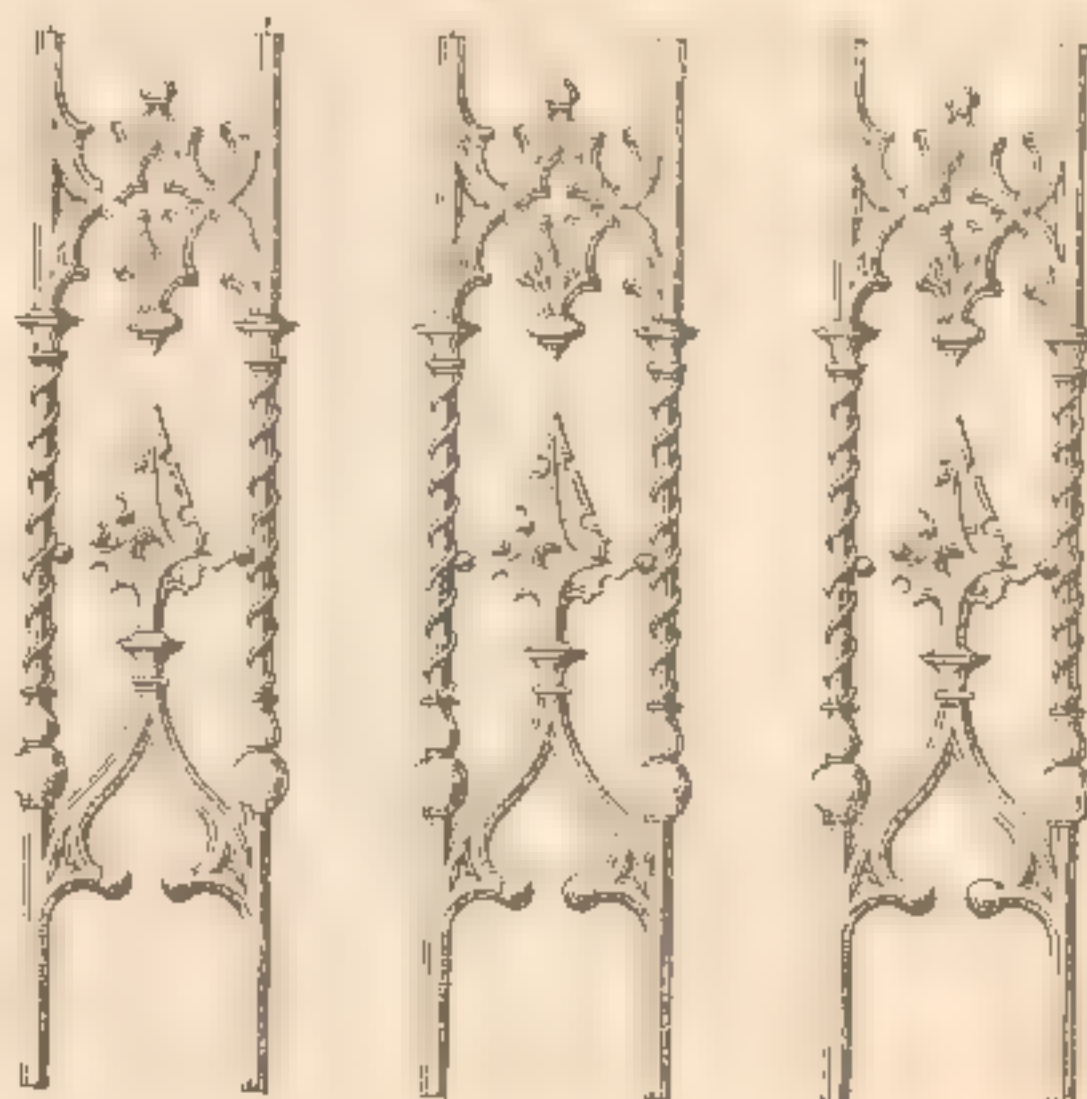


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No. 546

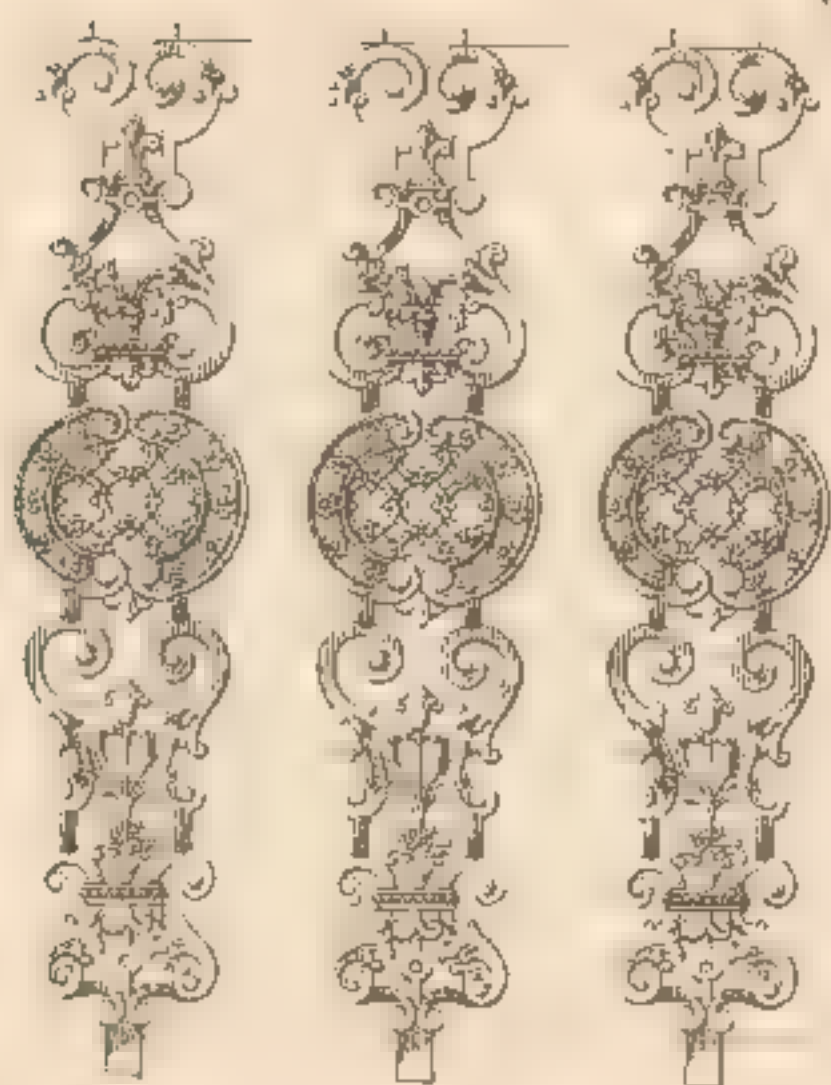


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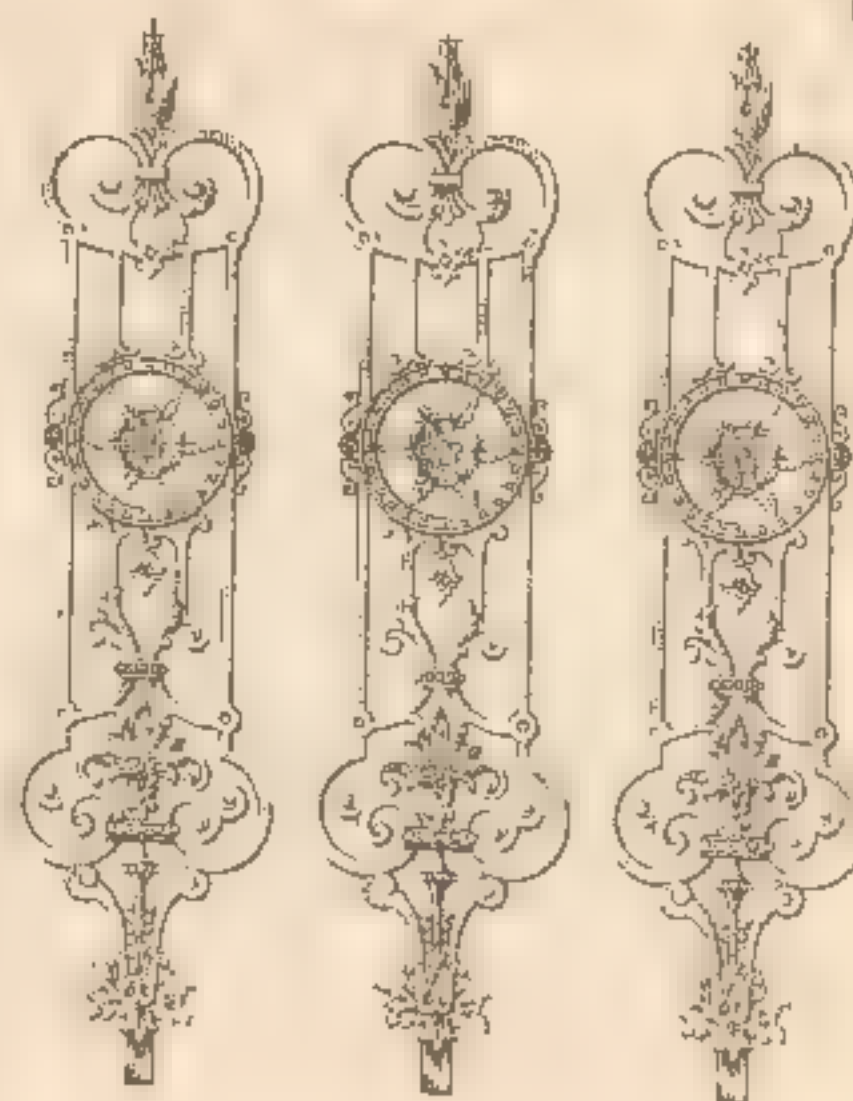
No. 548

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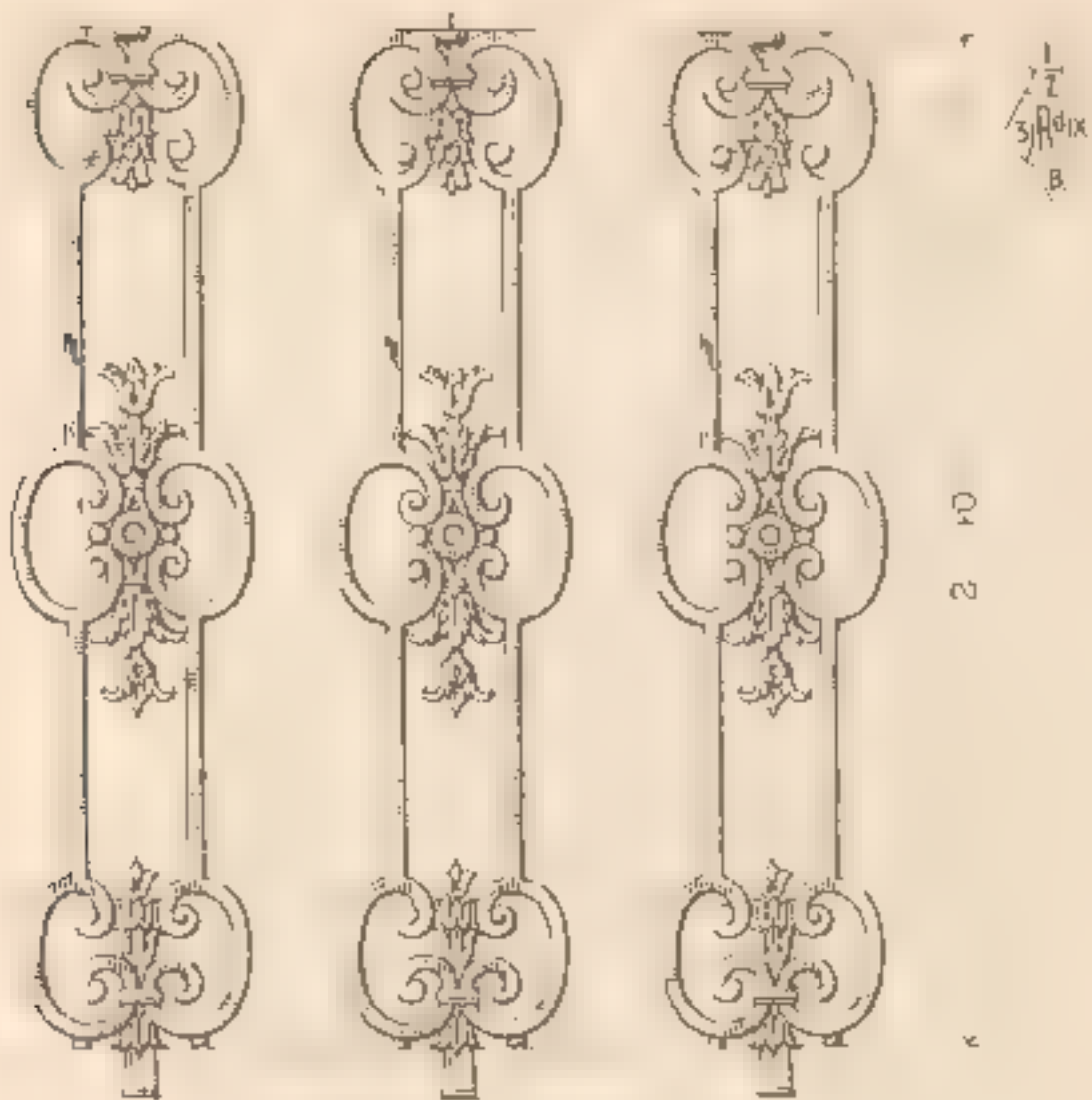
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SCALE 1 INCH = 1 FOOT

MACFARLANES BALUSTERS AND STAIR RAILINGS

No 59



S. R. L. E. N. 481 PA. F. 36

No 50



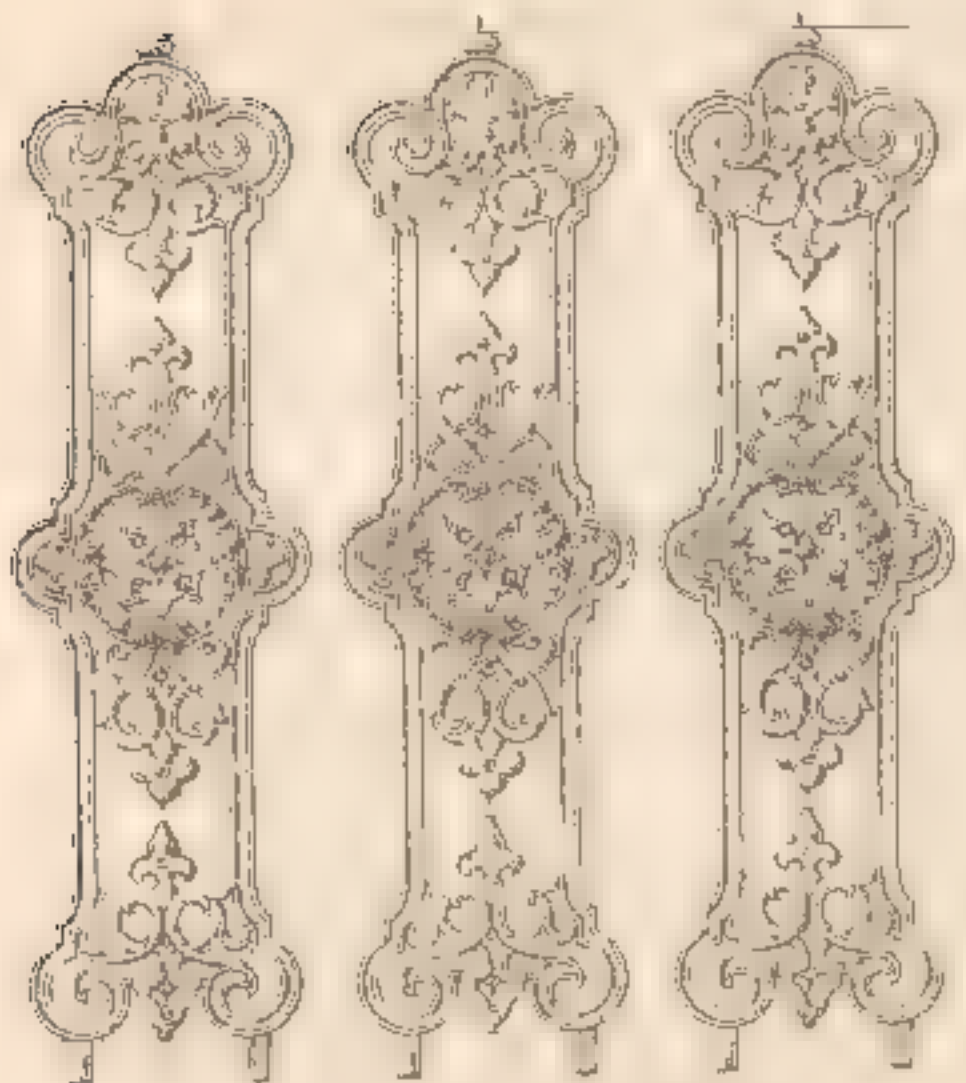
No 595



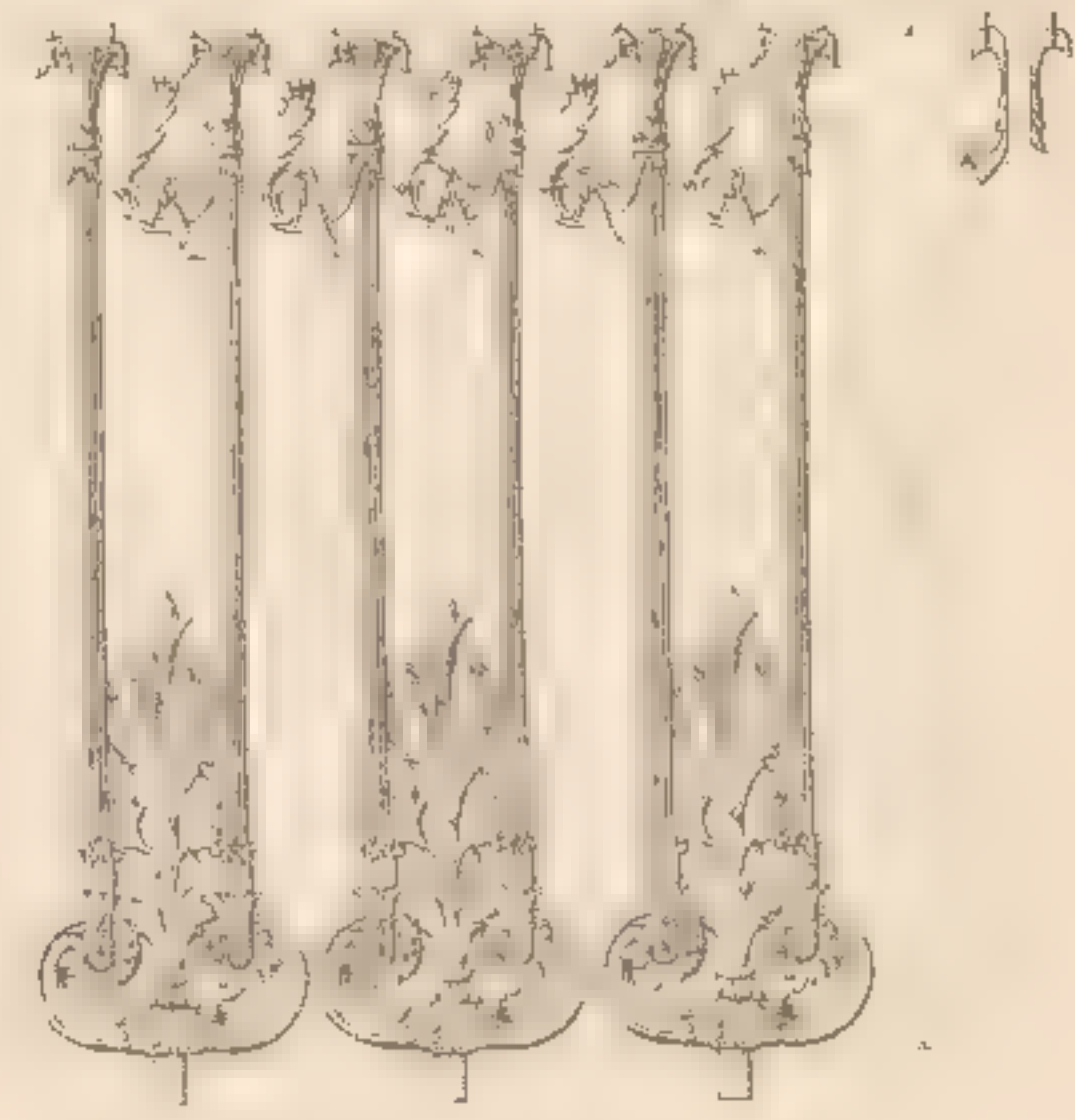
No 547



No 594



S. R. L. E. N. 481 PA. F. 36

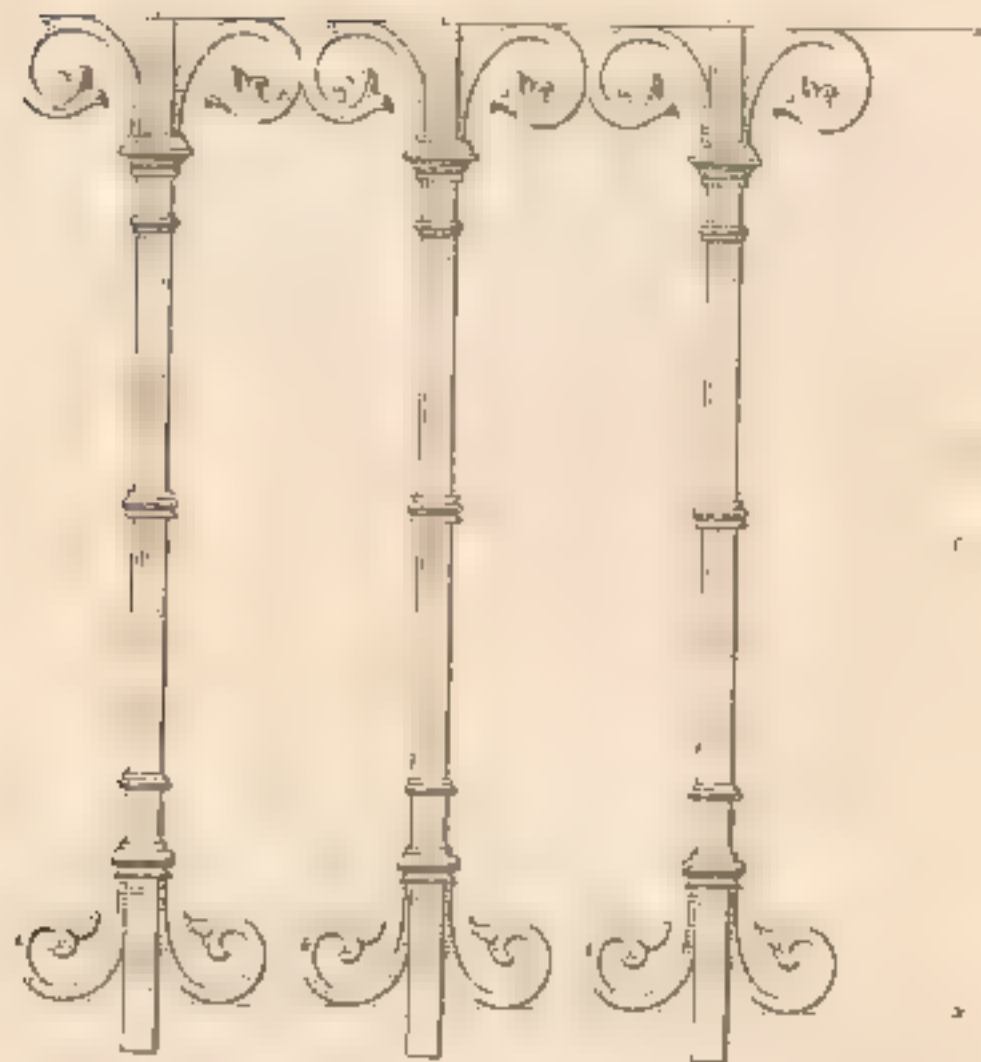


The Husk on No. 591 is loose, having two holes for screwing to Handrail, thus allowing the shank to be cut to any length, for convenience in fitting up at site.

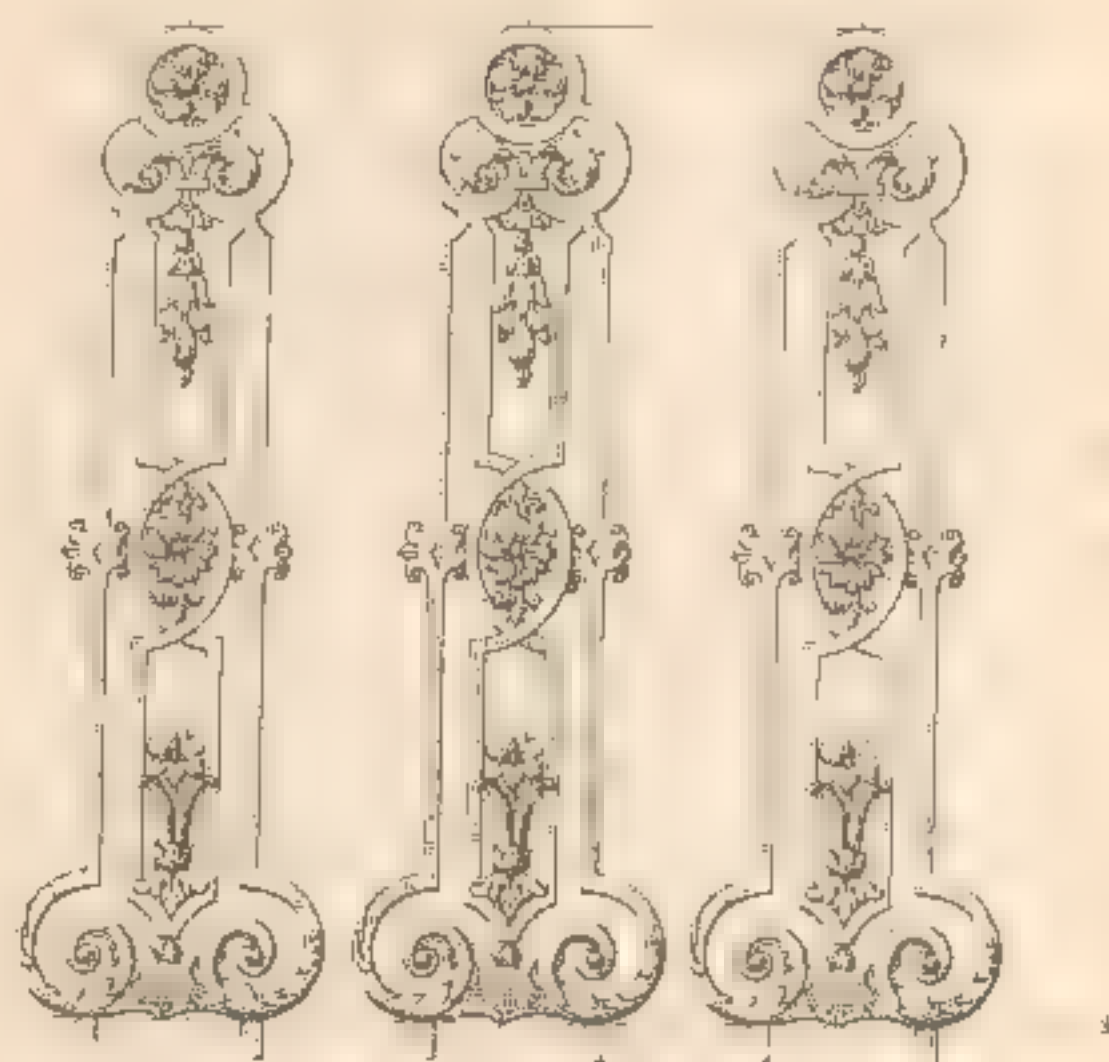
SCALE 1 INCH = 1 FOOT

MACFARLANE'S BALUSTERS AND STAIR RAILING.

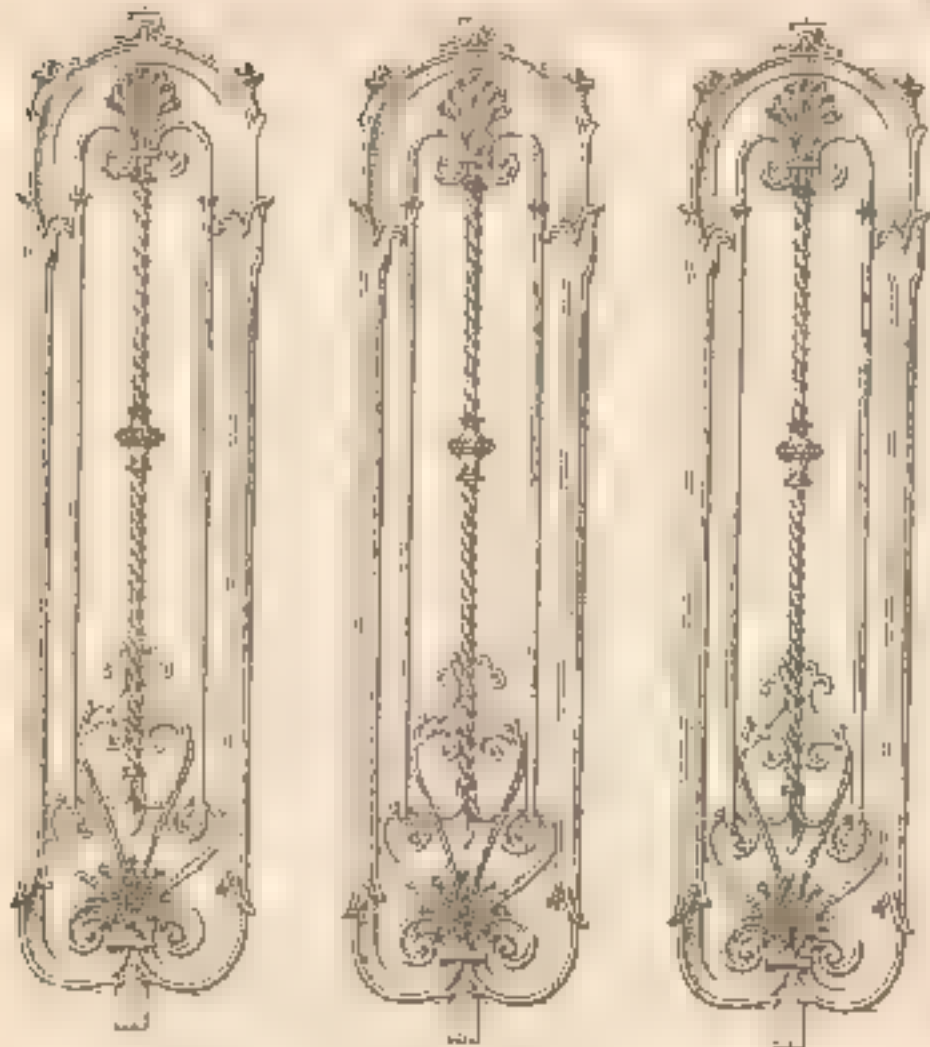
No 596



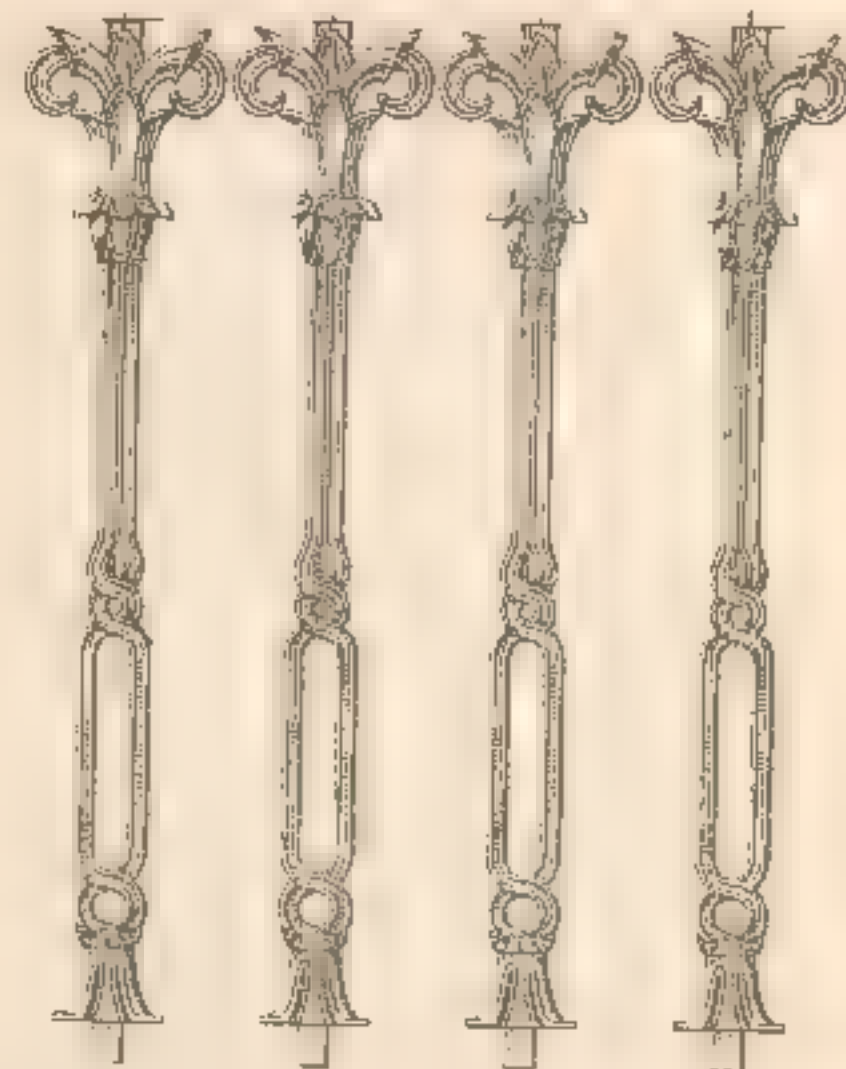
No 597.



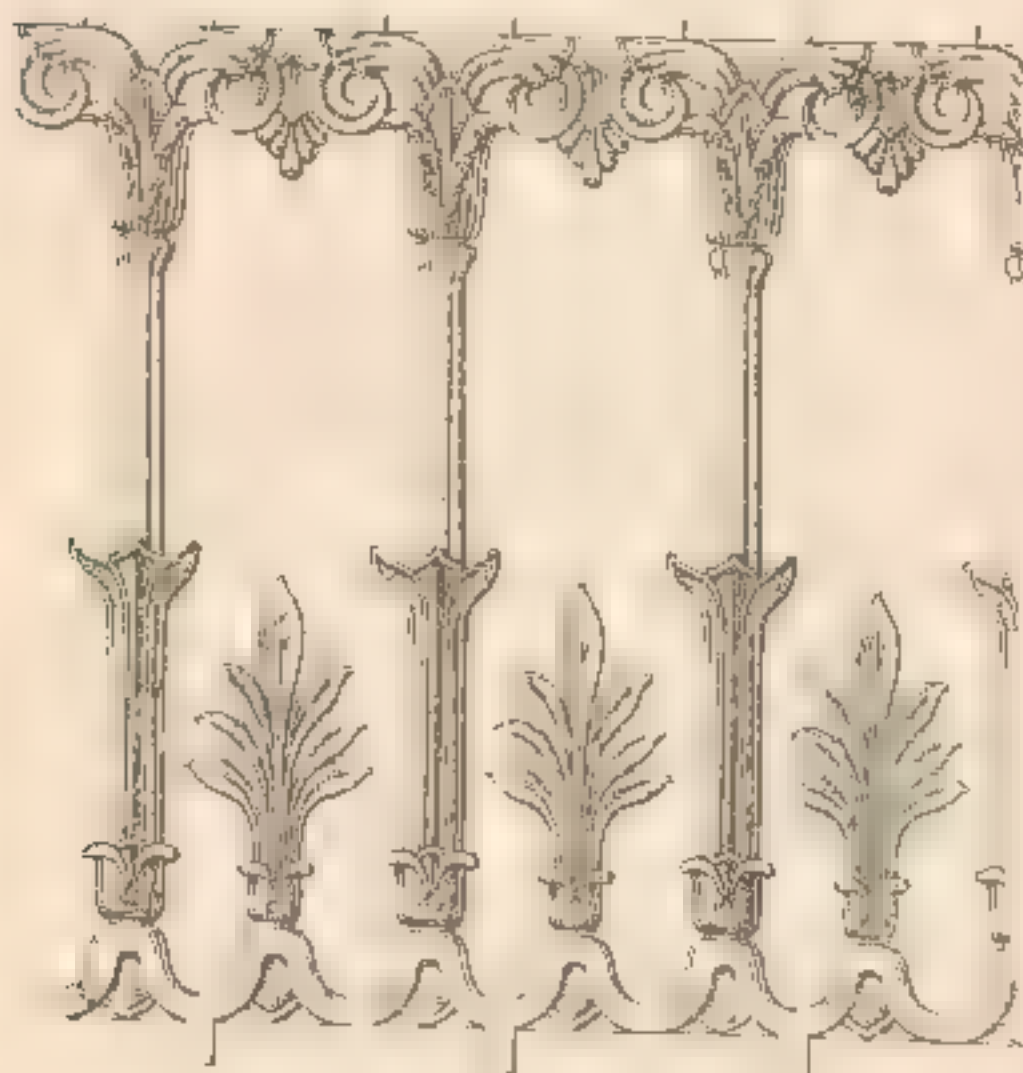
No 6



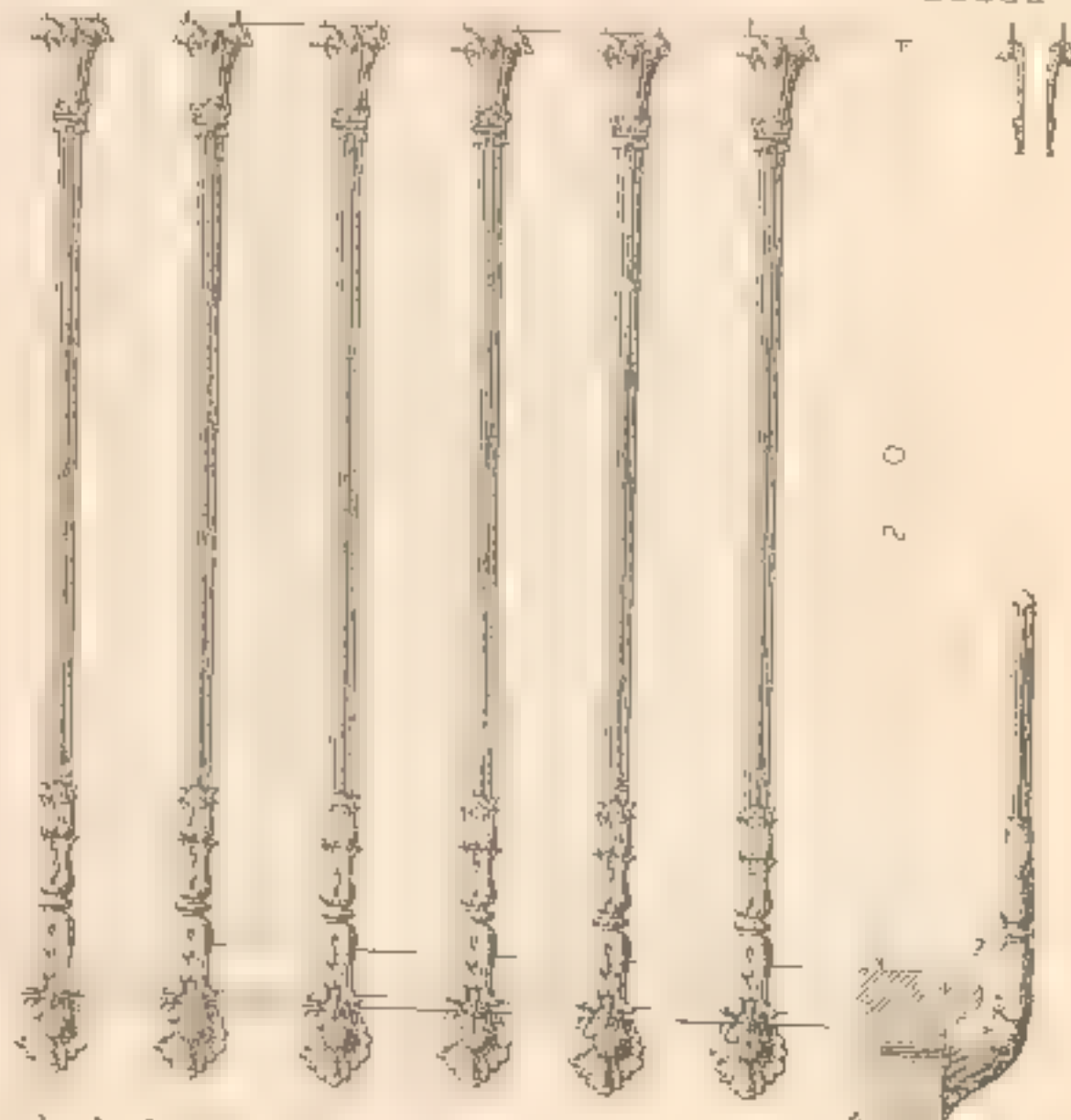
No 6



No 606



No 625 OVERHANGING

SECTION OF
LOOSE HUSK

The Husk on No. 625 is loose, having two holes for screwing to handrail, thus allowing the shank to be cut to any length, for convenience in fitting up at site.

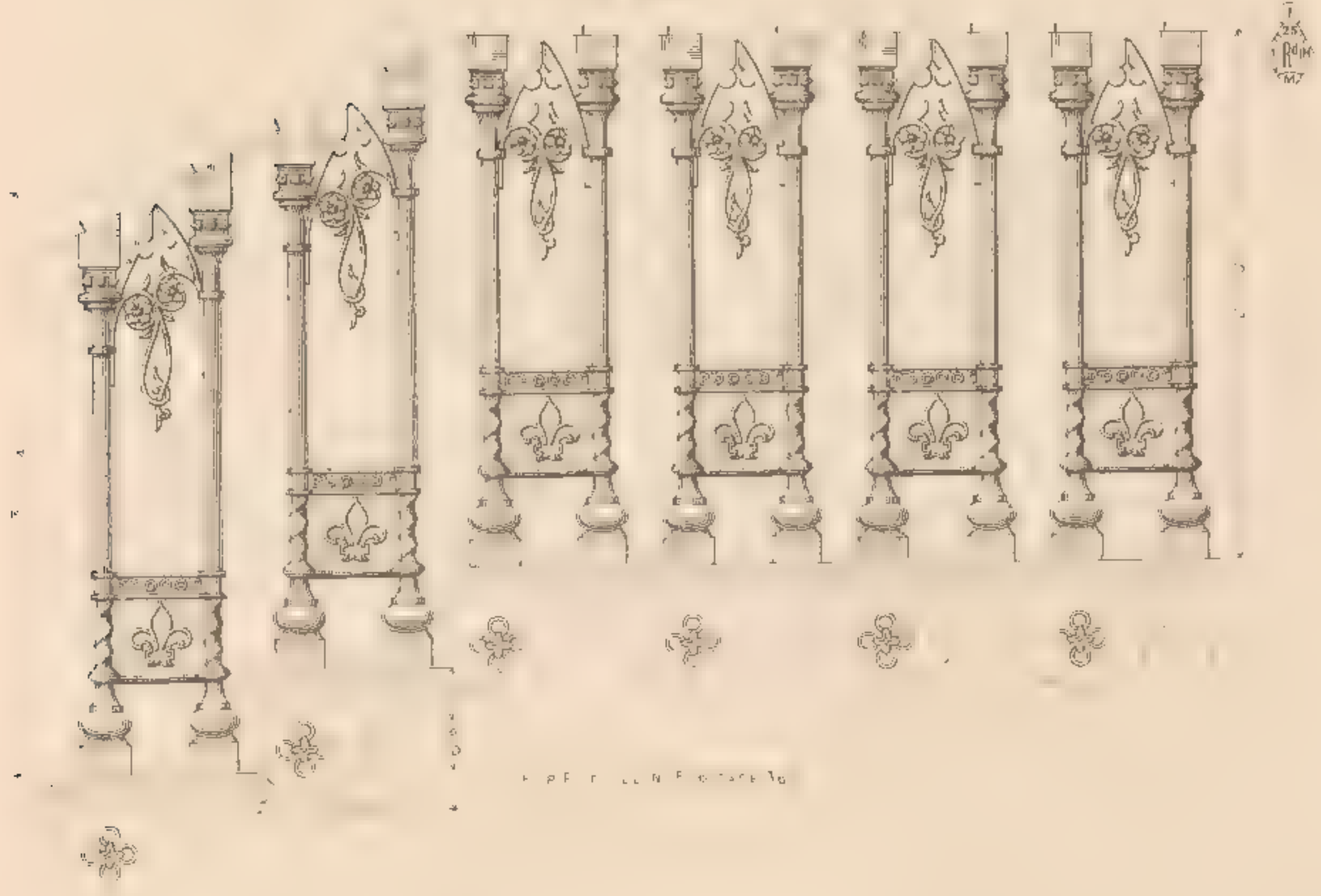
SCALE 1 INCH = 1 FOOT

MACFARLANE'S BALUSTERS AND STAIR RAILING.

Nº 607



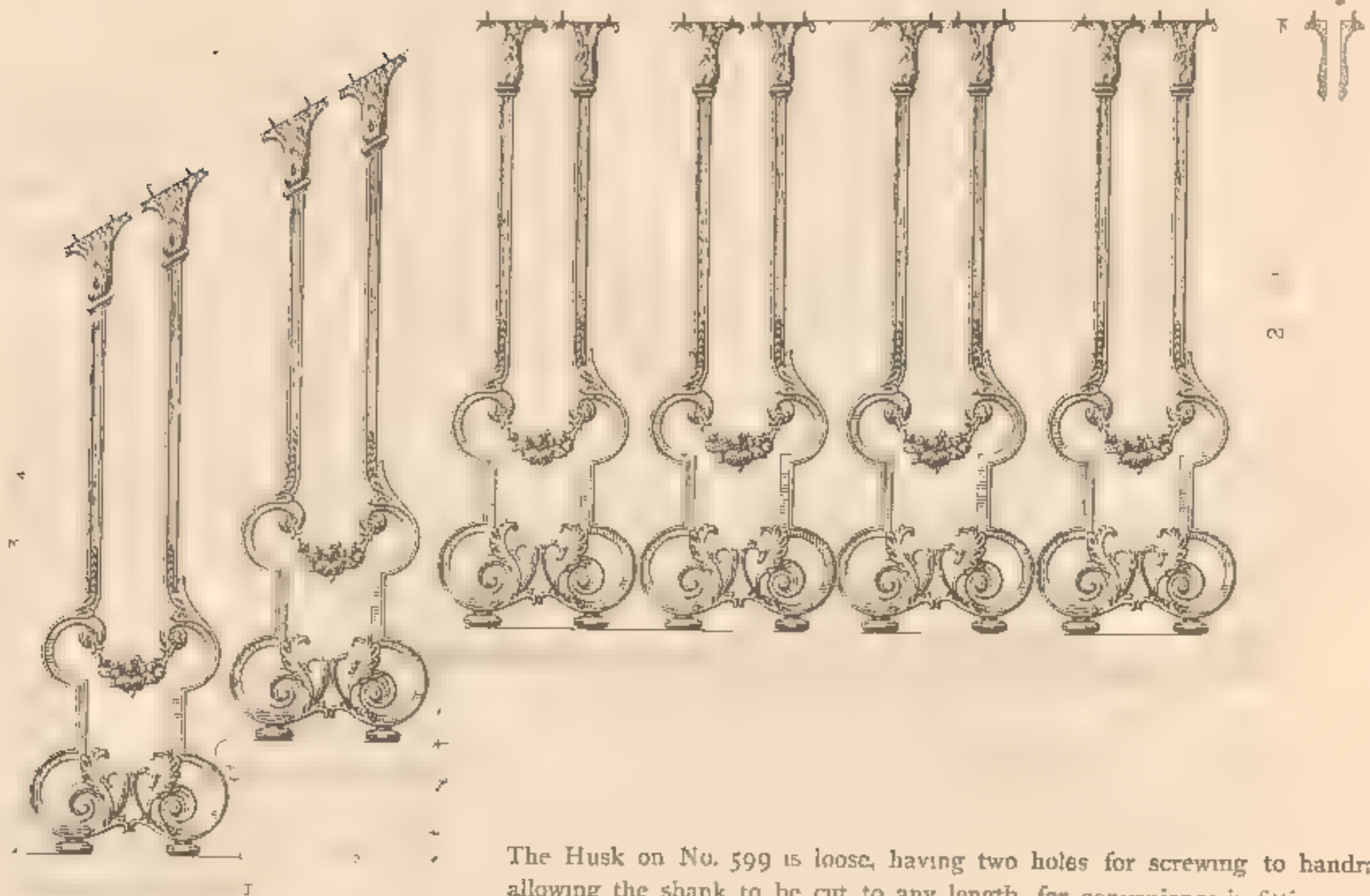
Nº 608



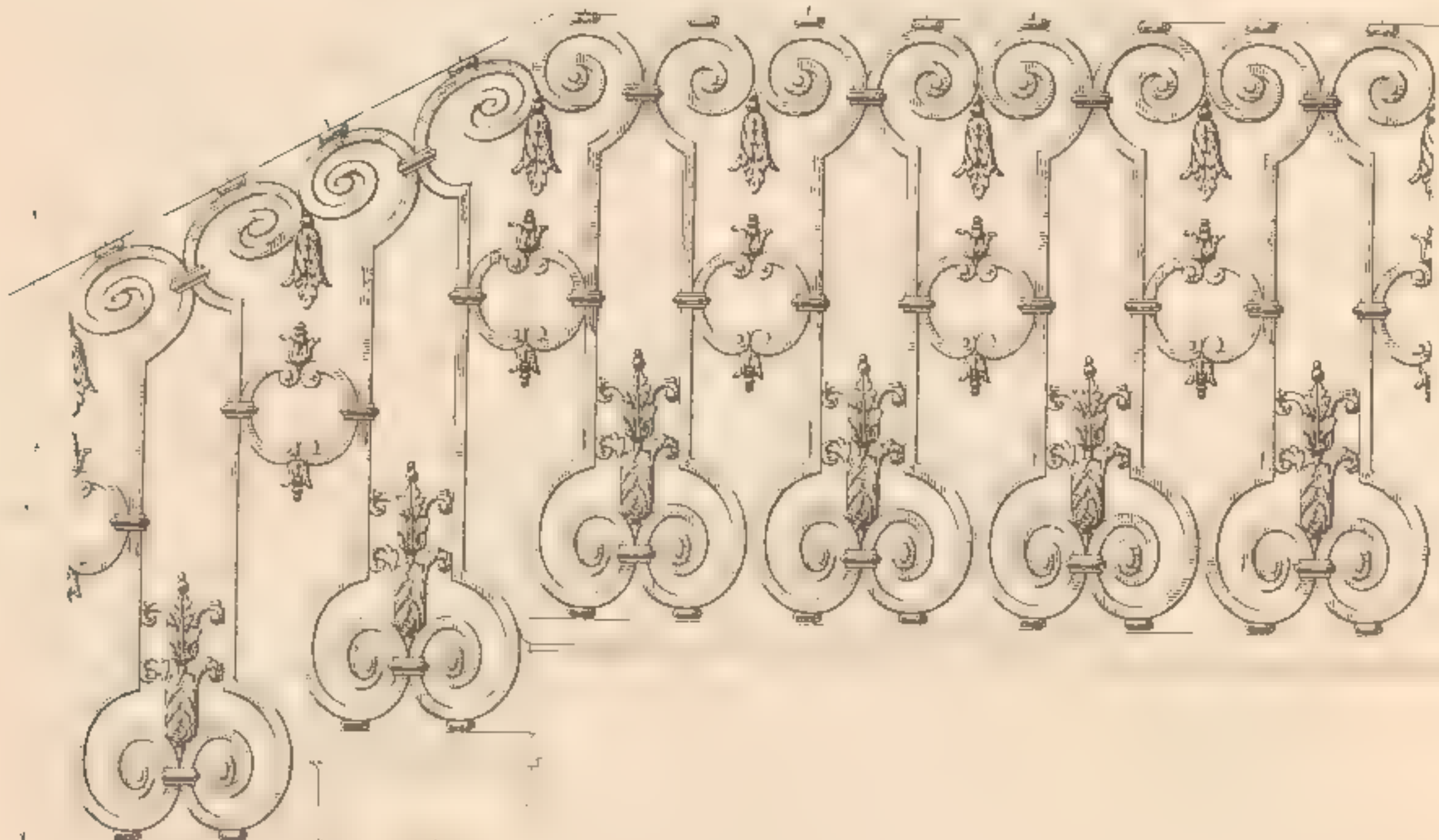
MACFARLANE'S PATENT

MACFARLANE'S BALUSTERS AND STAIR RAILING

No 599

SECTION OF
LOOSE HUSK

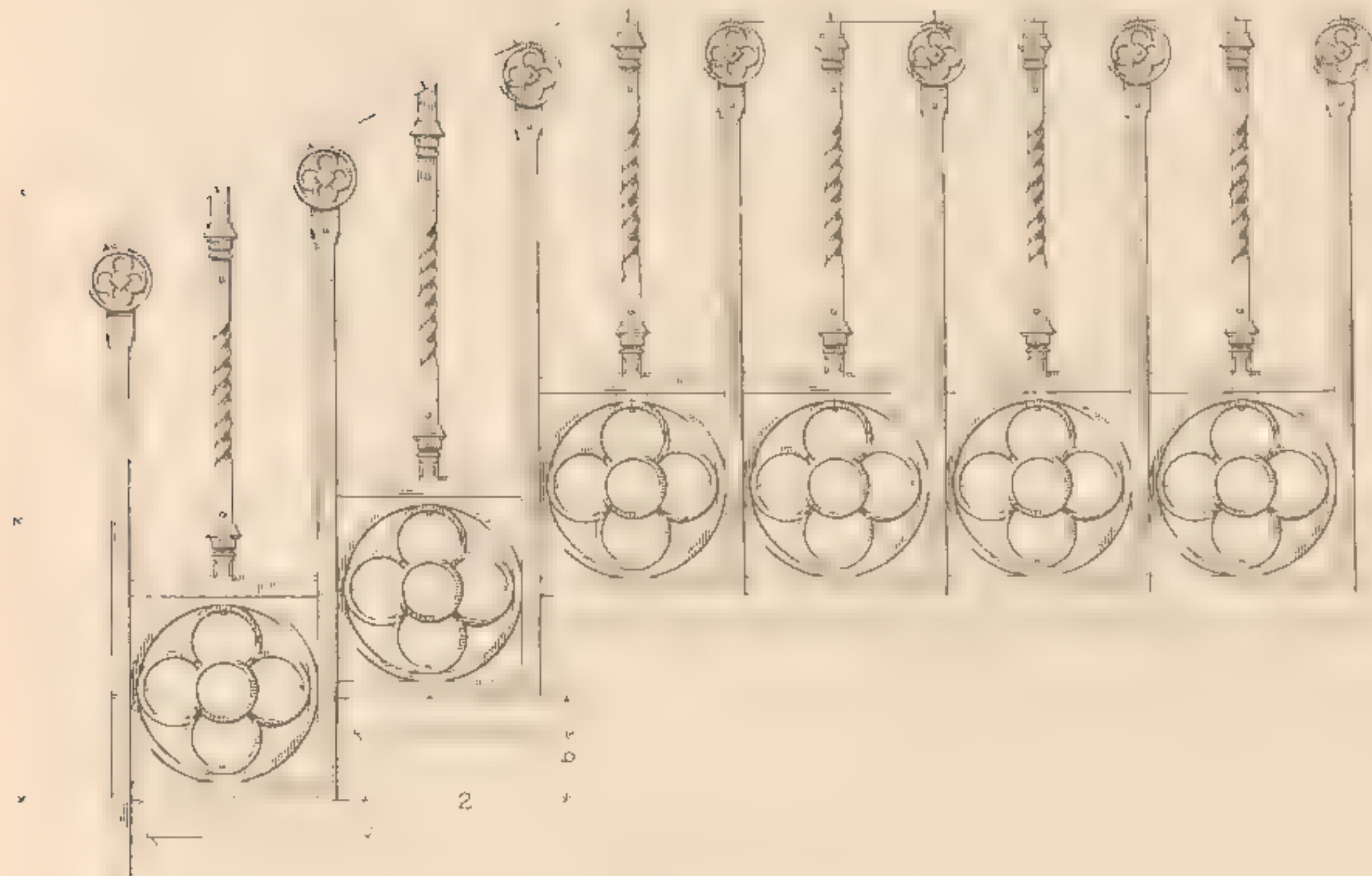
The Husk on No. 599 is loose, having two holes for screwing to handrail, thus allowing the shank to be cut to any length, for convenience in fitting up at site.



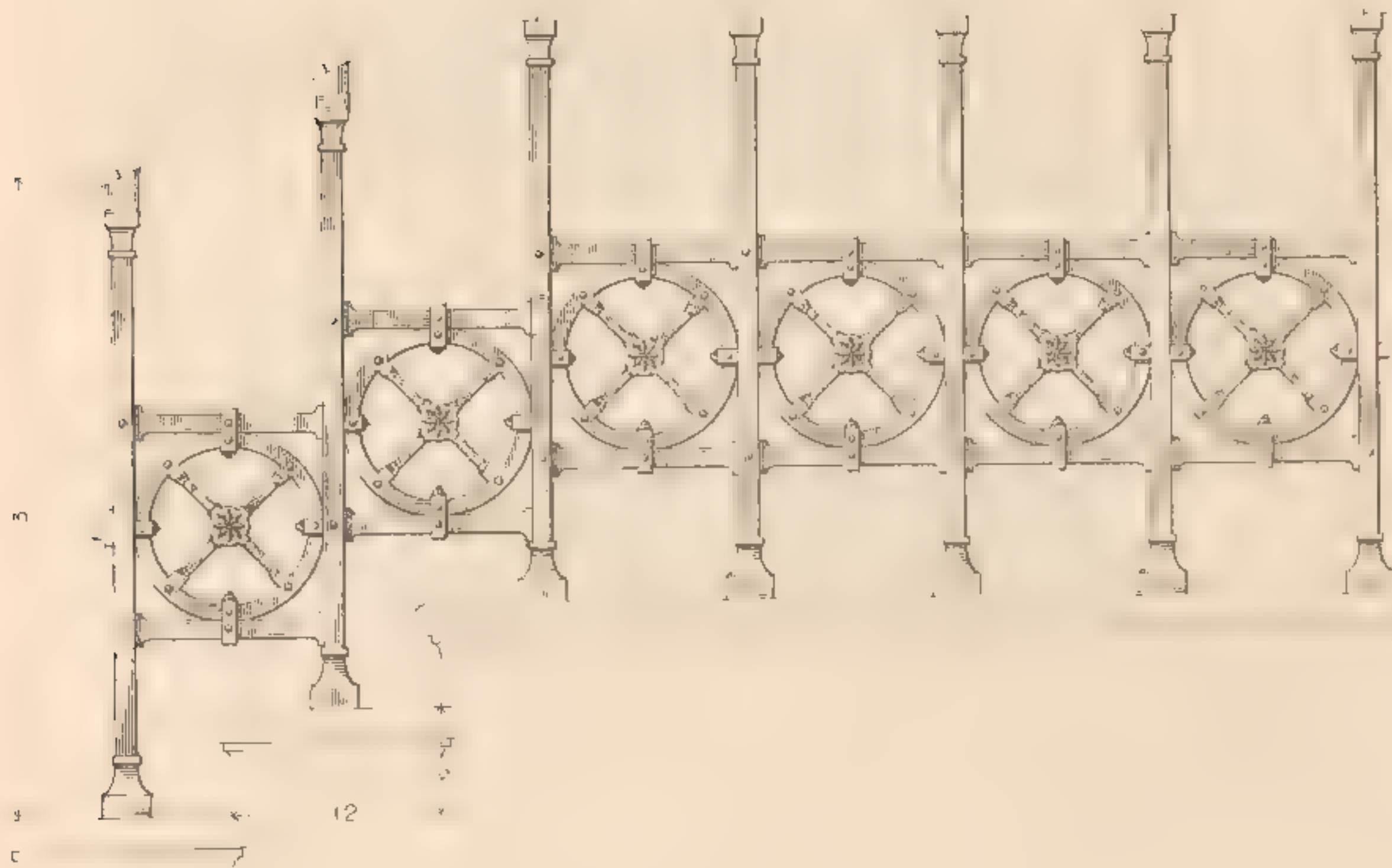
SCALE 1 INCH = 1 FOOT

MACFARLANE'S BALUSTERS AND STAIR RAILING.

N^o 67



N^o 673



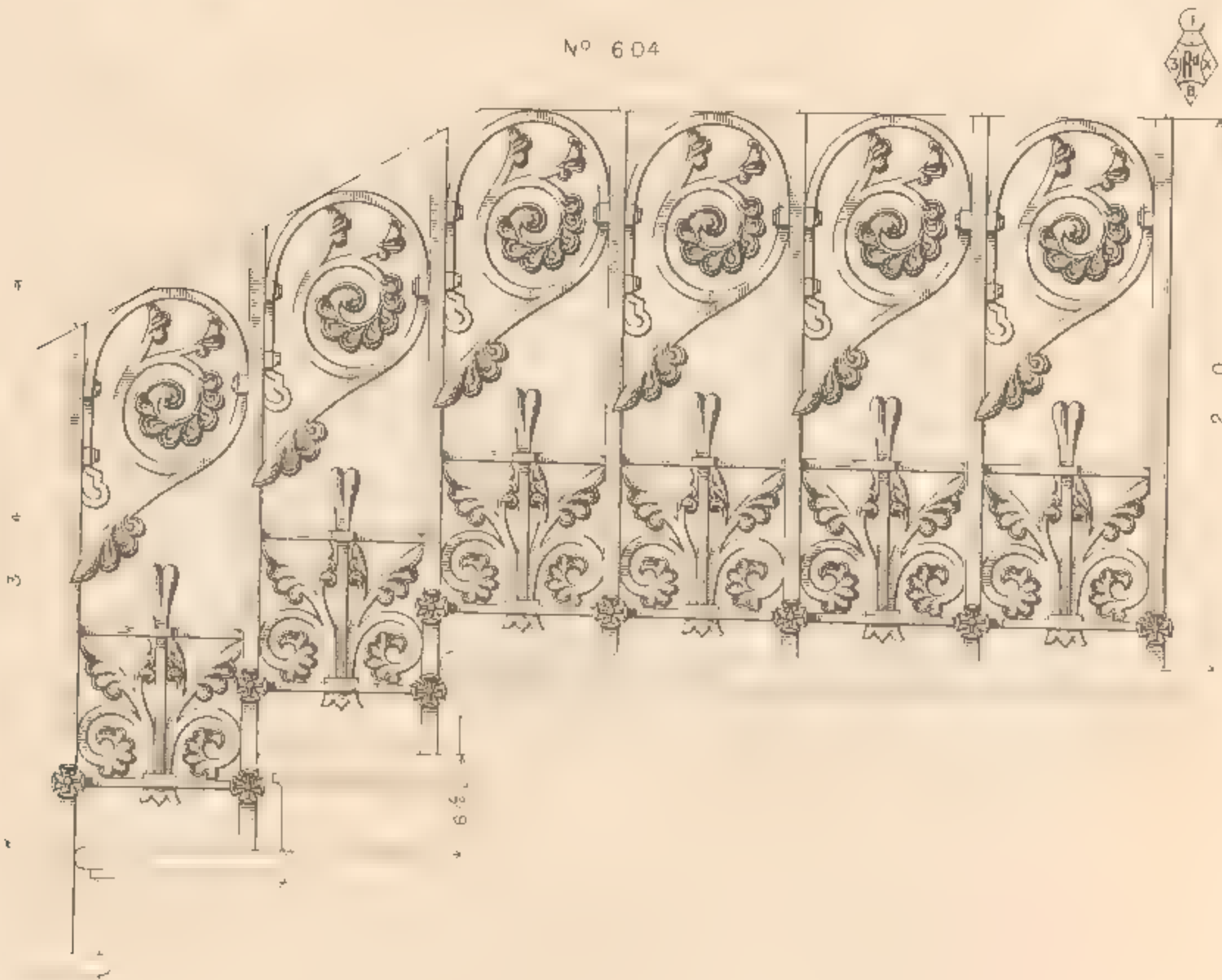
SCALE 1/4" = 1 FOOT

MACFARLANE'S BALUSTERS, AND STAR RAILING

Nº 620 OVERHAN Nº



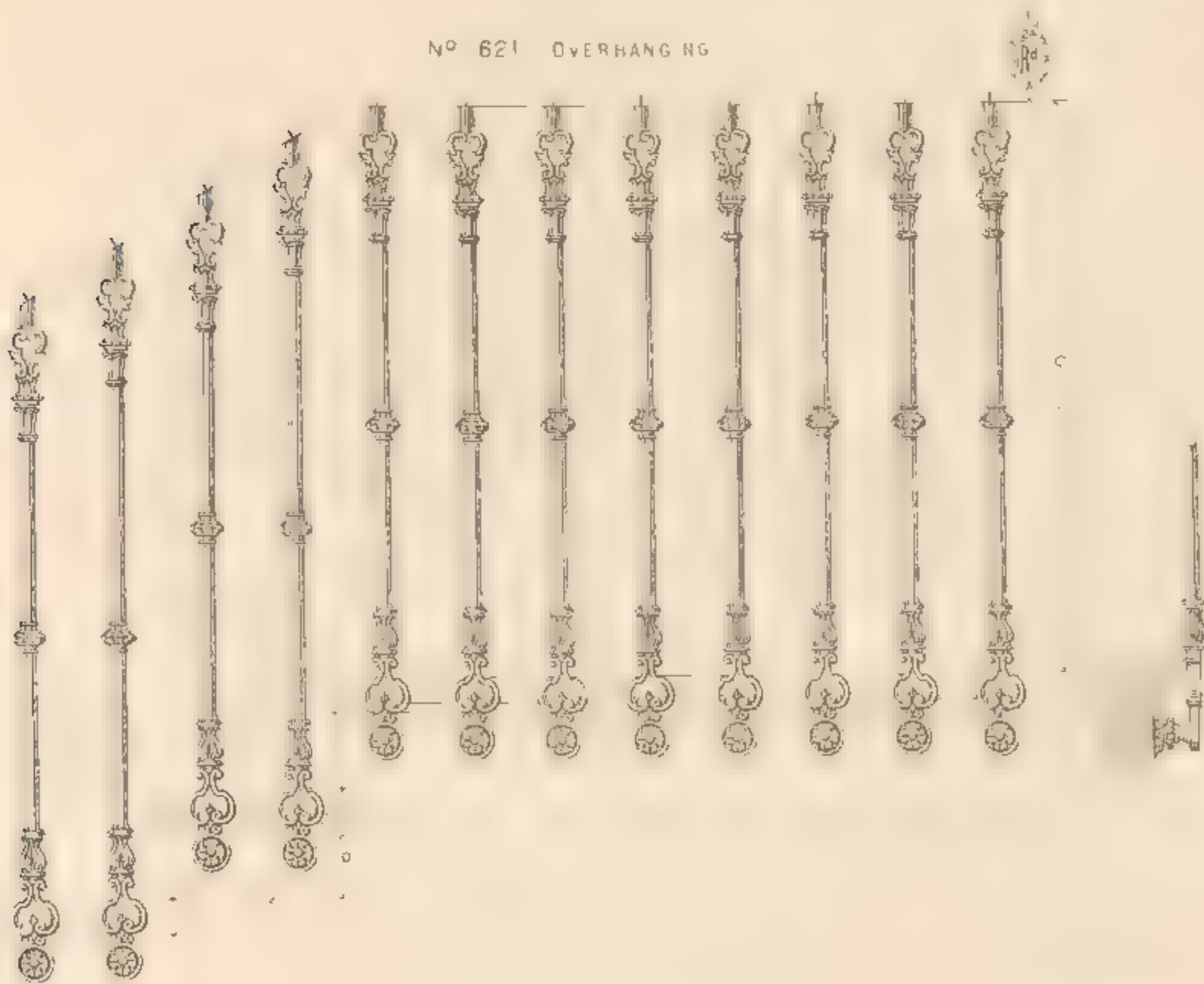
Nº 604



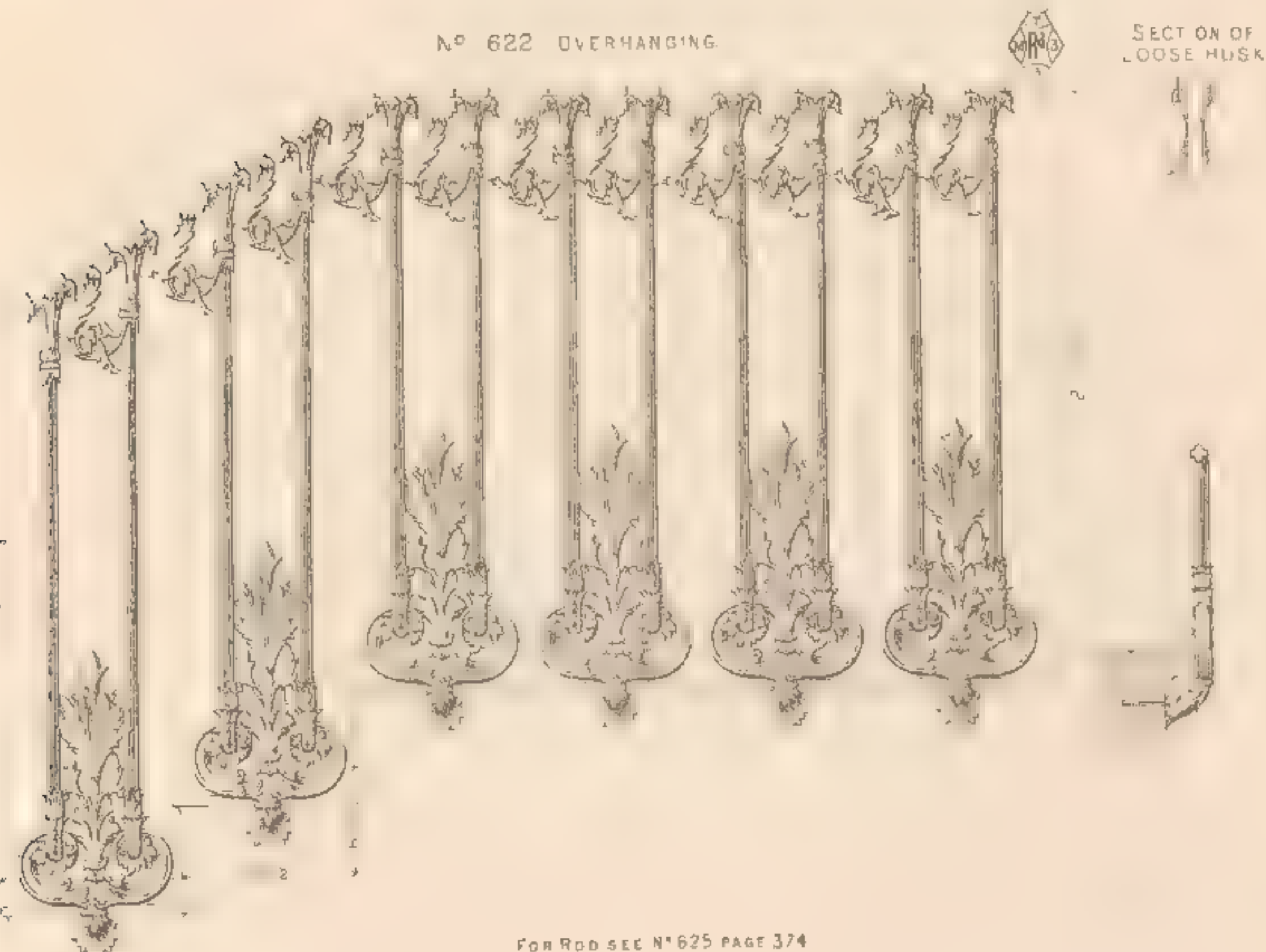
SCALE INCH 1 FOOT

MACFARLANE'S BALUSTERS AND STAIR RAILING.

Nº 621 OVERHANGING



Nº 622 OVERHANGING



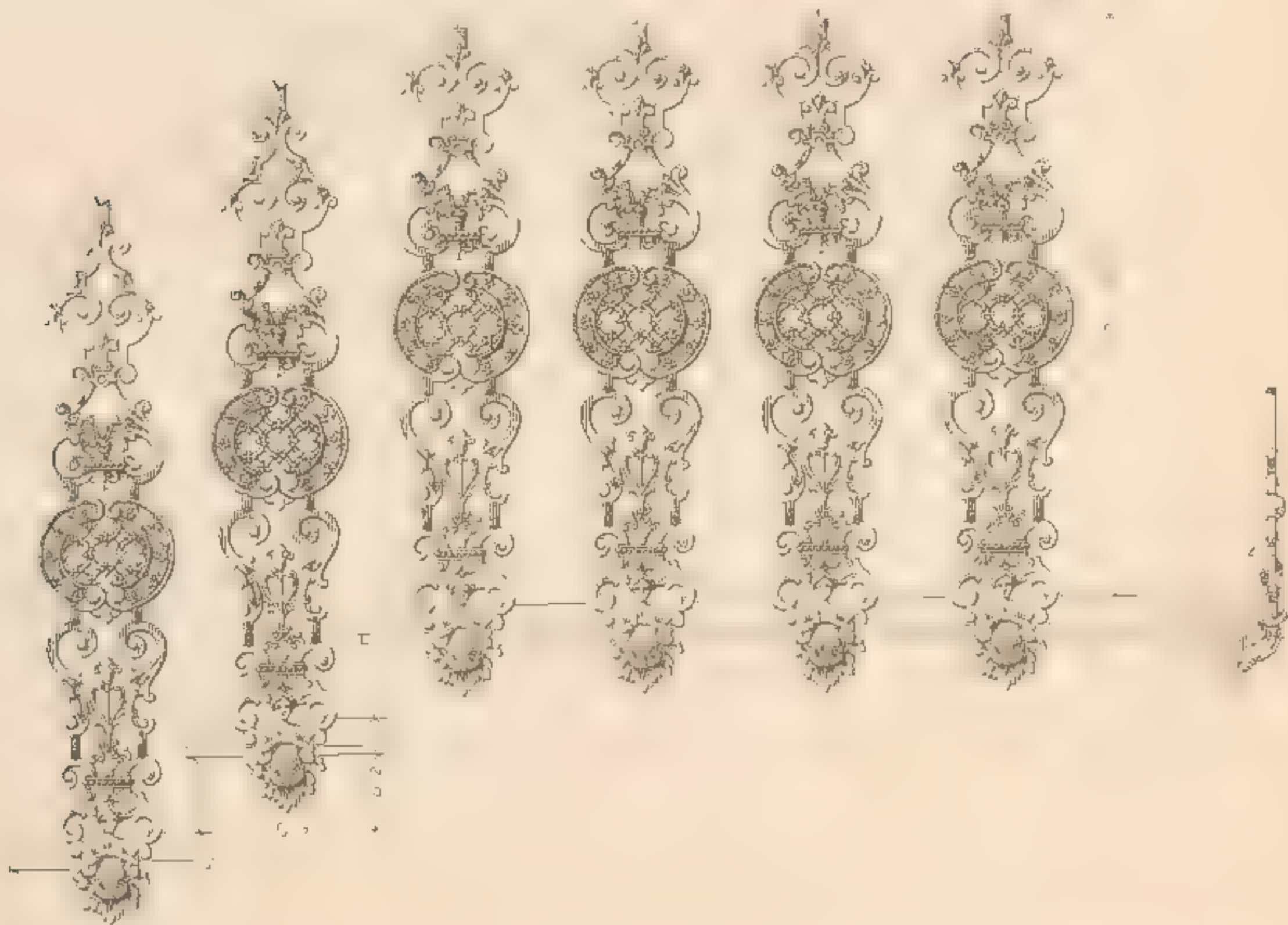
FOR ROD SEE Nº 625 PAGE 374

The Husk on No. 622 is loose, having two holes for screwing to handrail, thus allowing the shank to be cut to any length, for convenience in fitting up at site.

SCALE INCH — 1 FOOT

MACFARLANE'S BALUSTERS AND STAIR RAILING

No 623 OVERHANGING

 $\frac{1}{2} \times \frac{1}{8}$


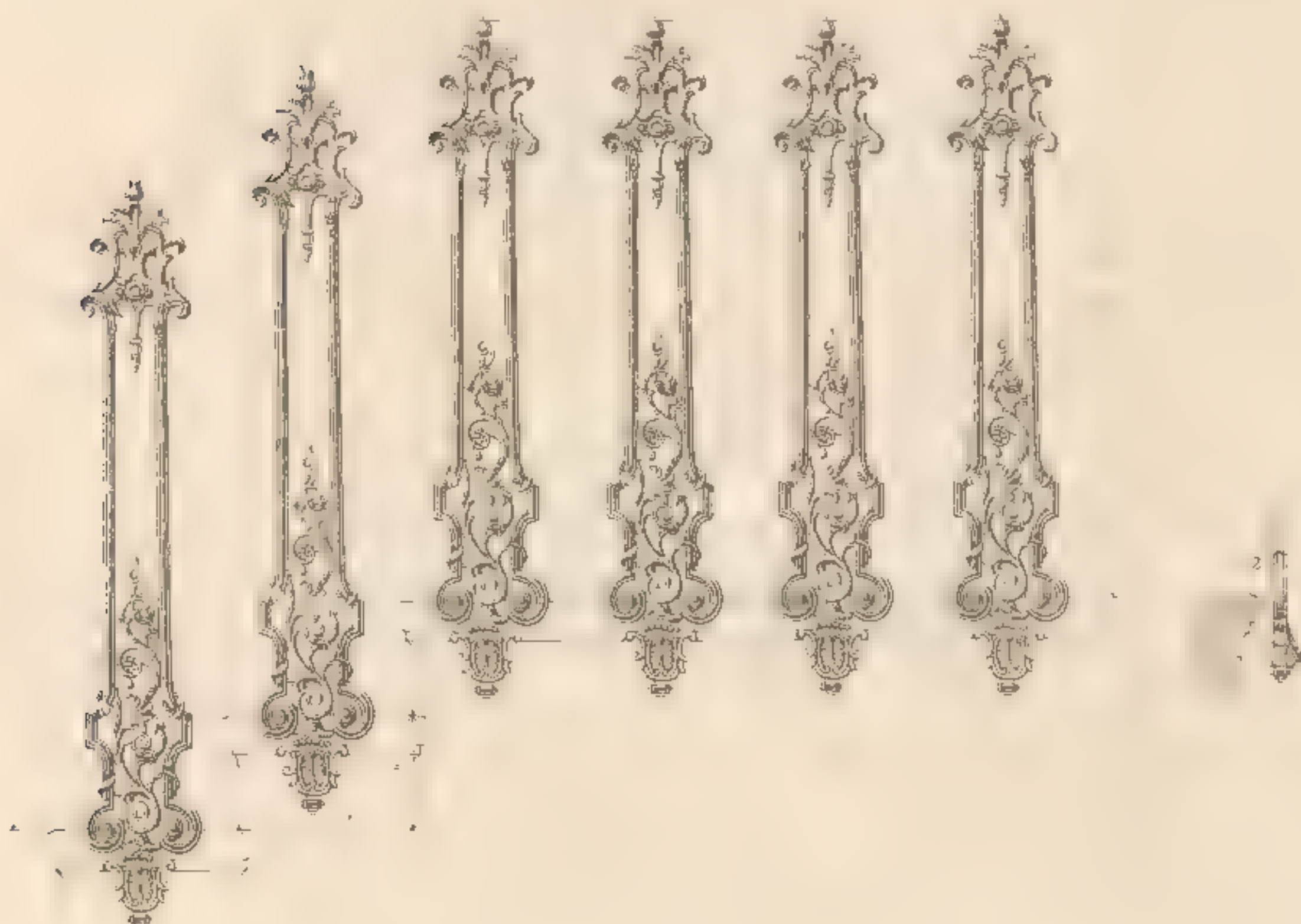
No 624 OVERHANGING

 $\frac{1}{2} \times \frac{1}{8}$

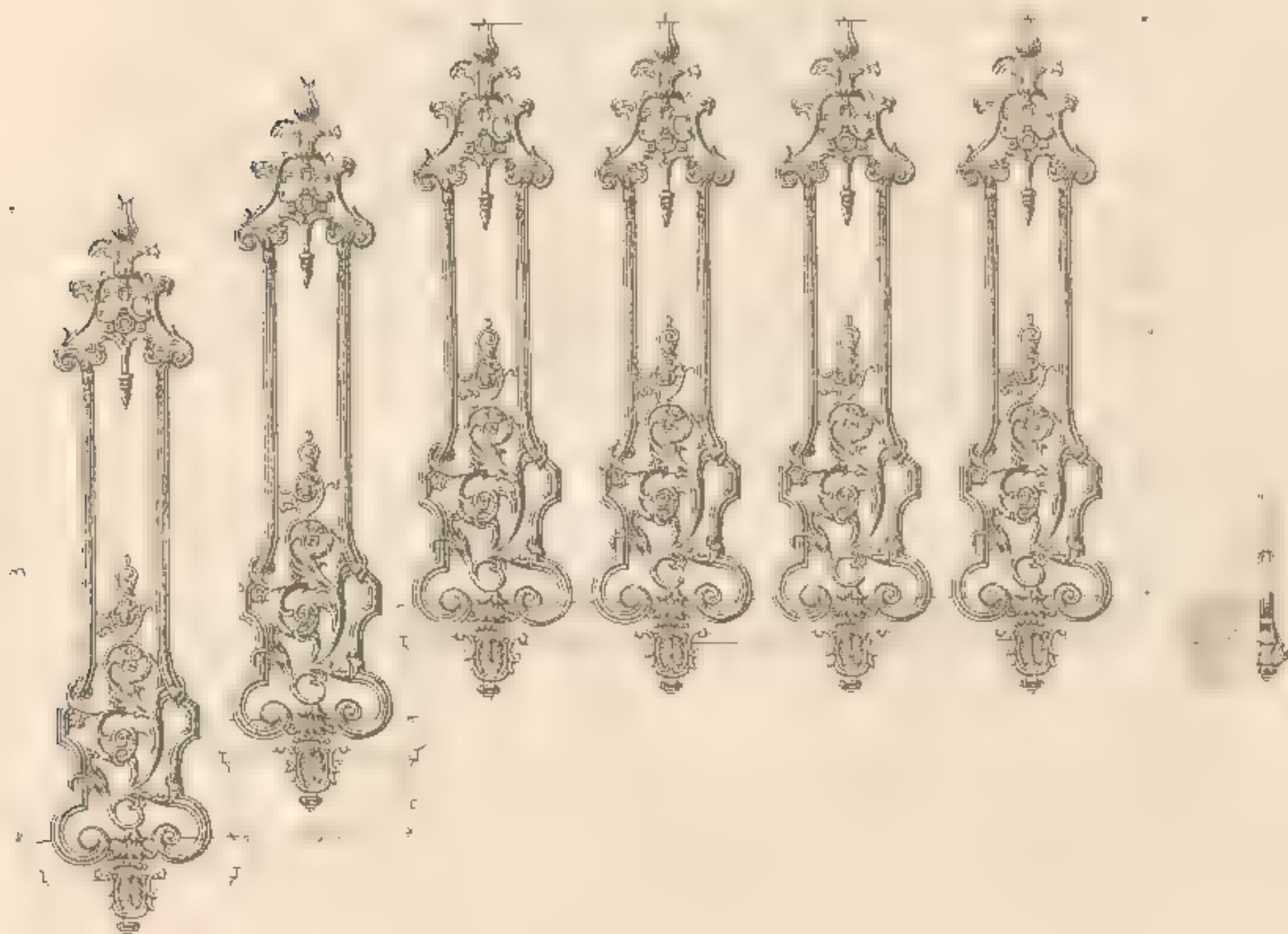

SCALE INCH FOOT

MACFARLANE'S BALUSTERS AND STAIR RAILING

NO 626 OVERHANGING



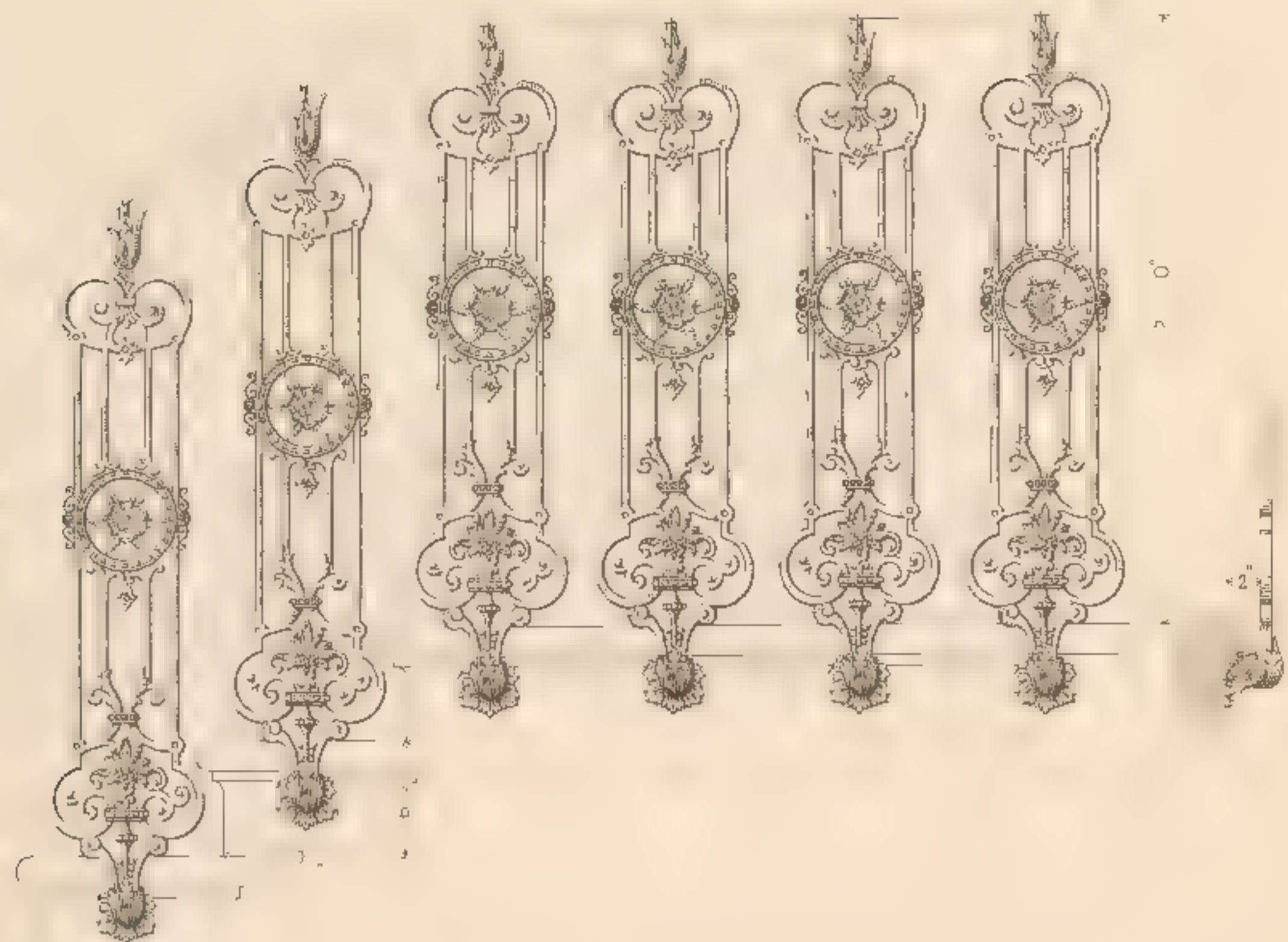
NO 627 OVERHANGING



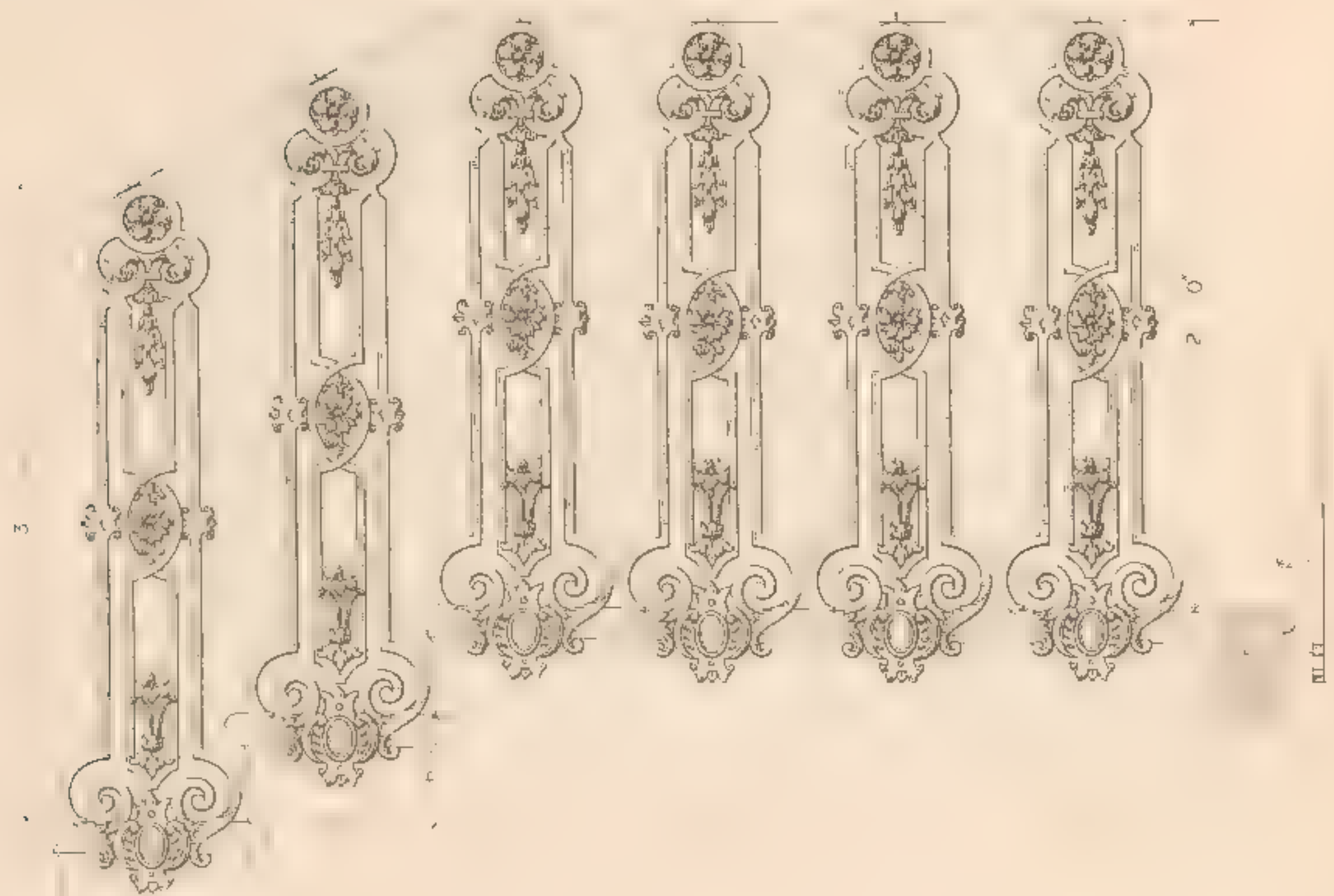
SCALE INCH — FOOT

MANIFOLDNESS OF STEPS AND STAIR RAILING

Nº 628 VERMONT



Nº 629 VERMONT



SCALE IN FEET

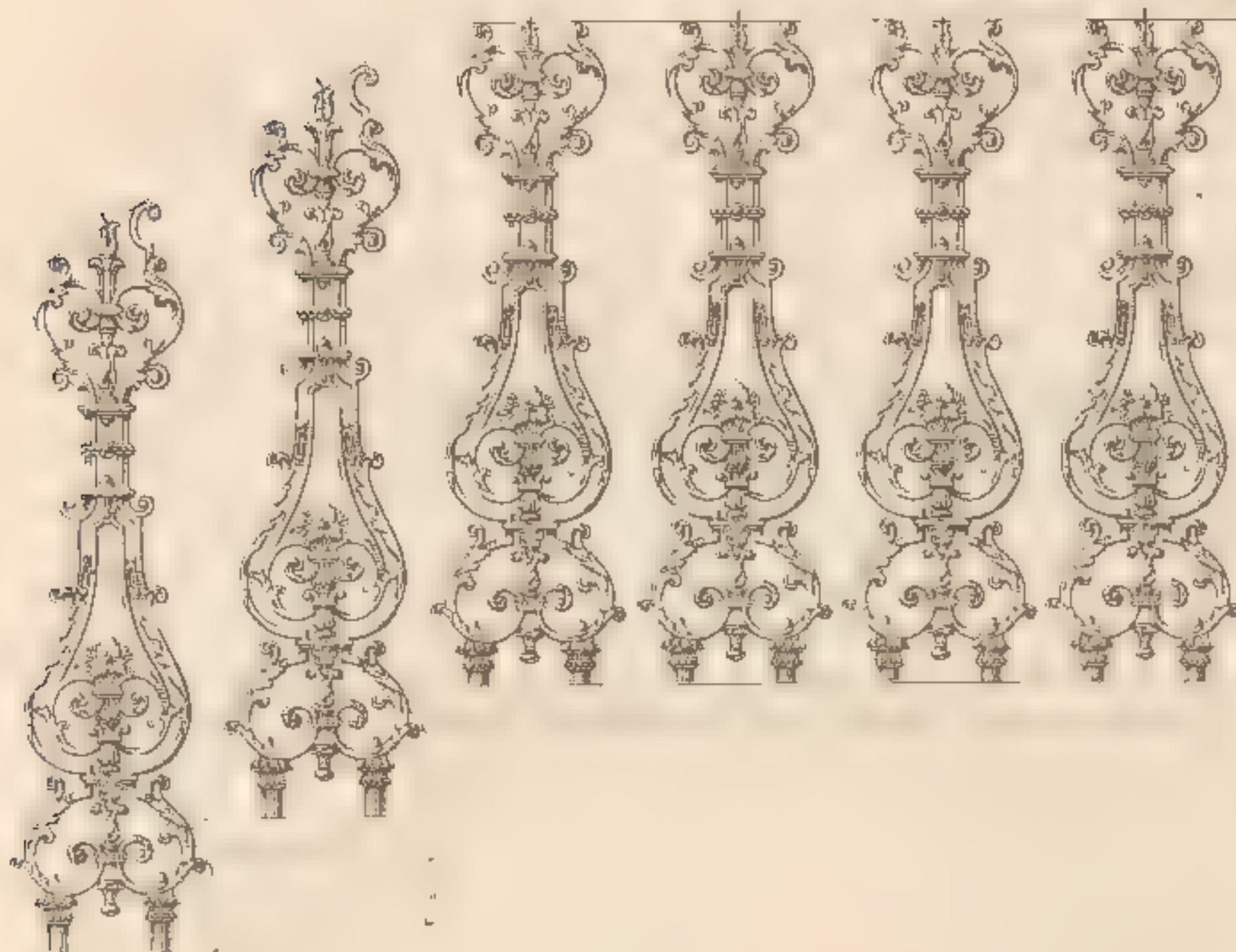
MA AF ANEC BAL ITI A S AR RA LG

N° 62



N° 588

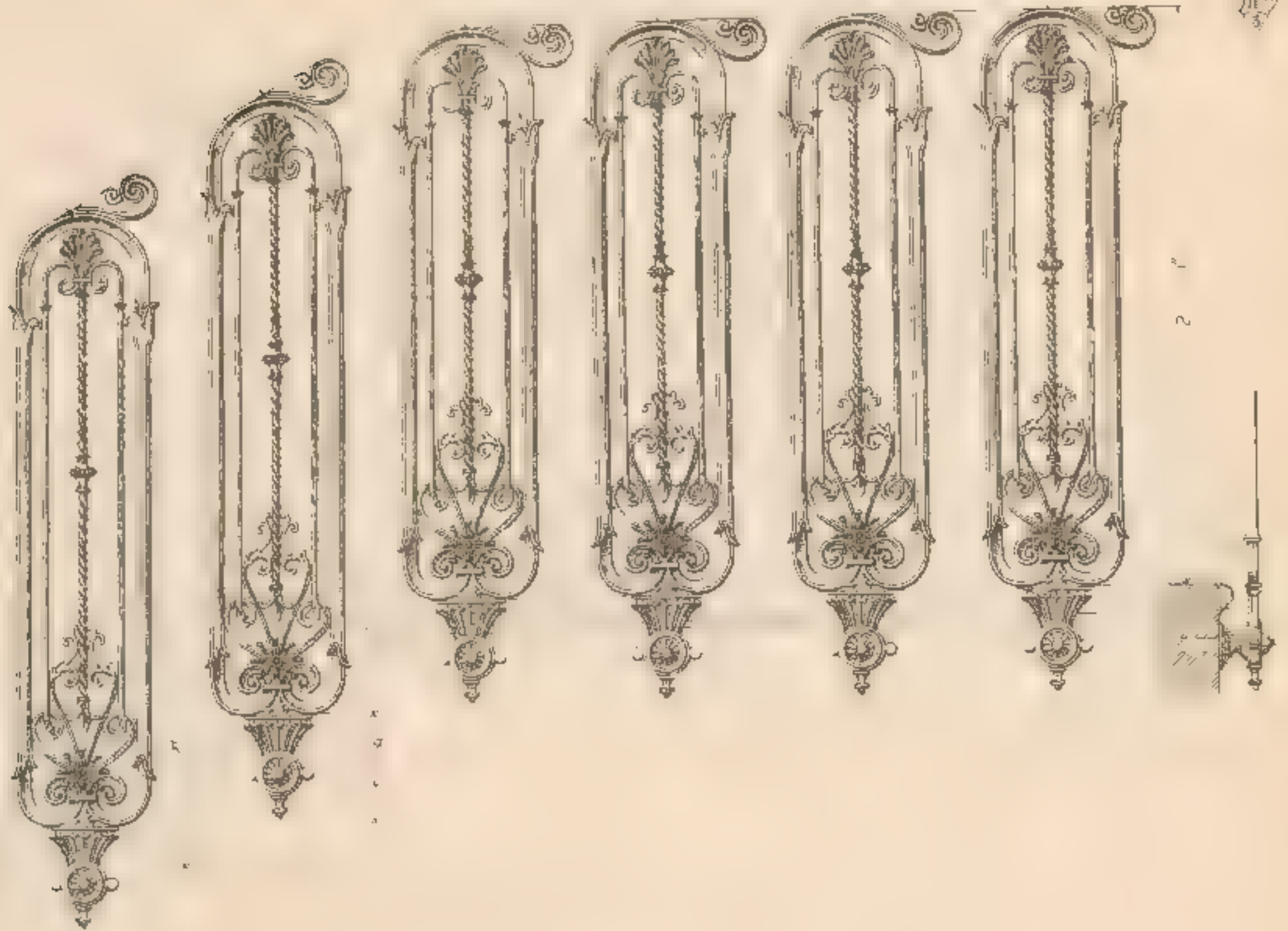
P. 11. 2000



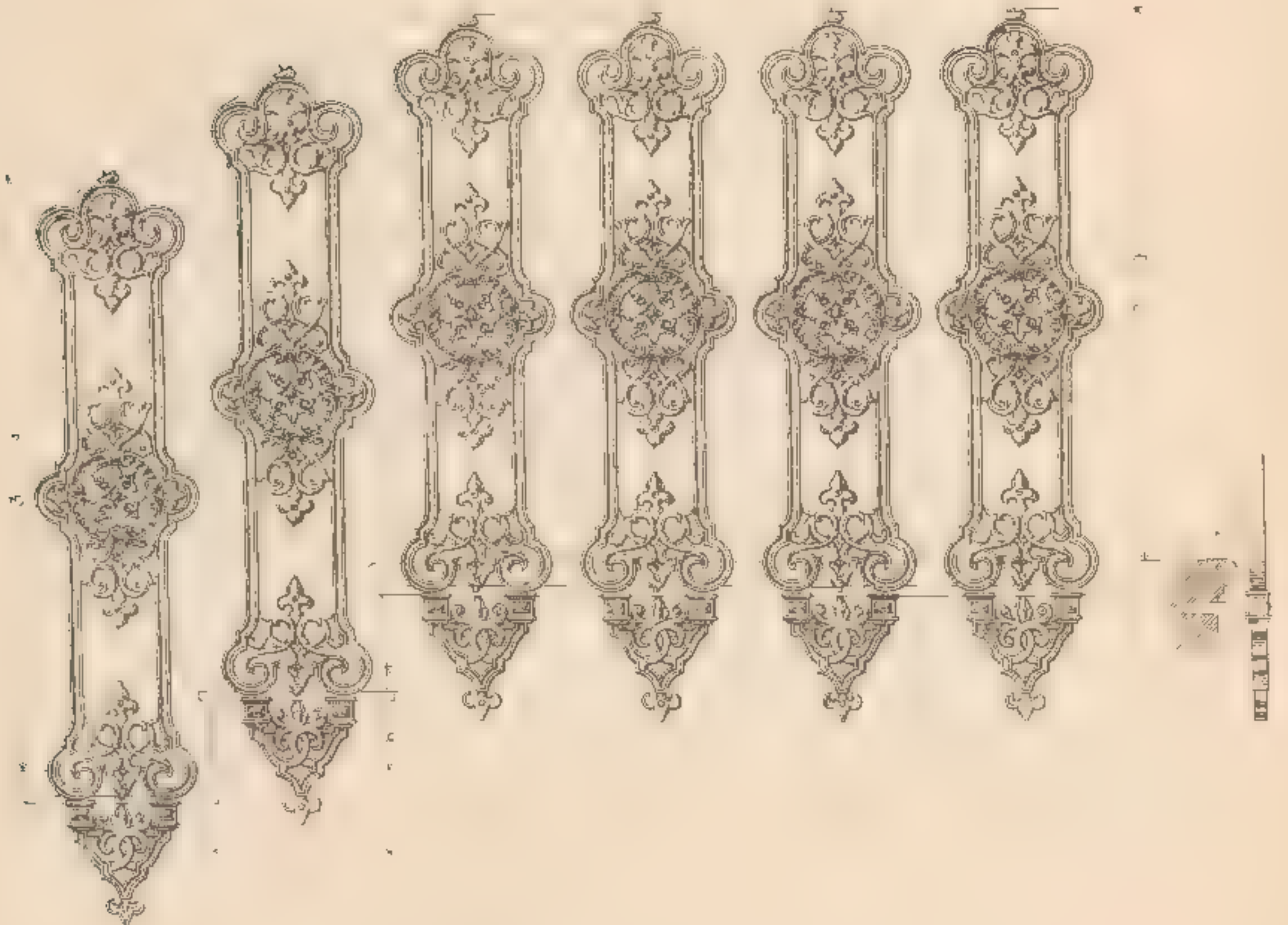
MA AF ANEC BAL ITI A S AR RA LG

MACFARLANE'S BALUSTERS AND STAIR RAILING

N. 63. OVERHANGING

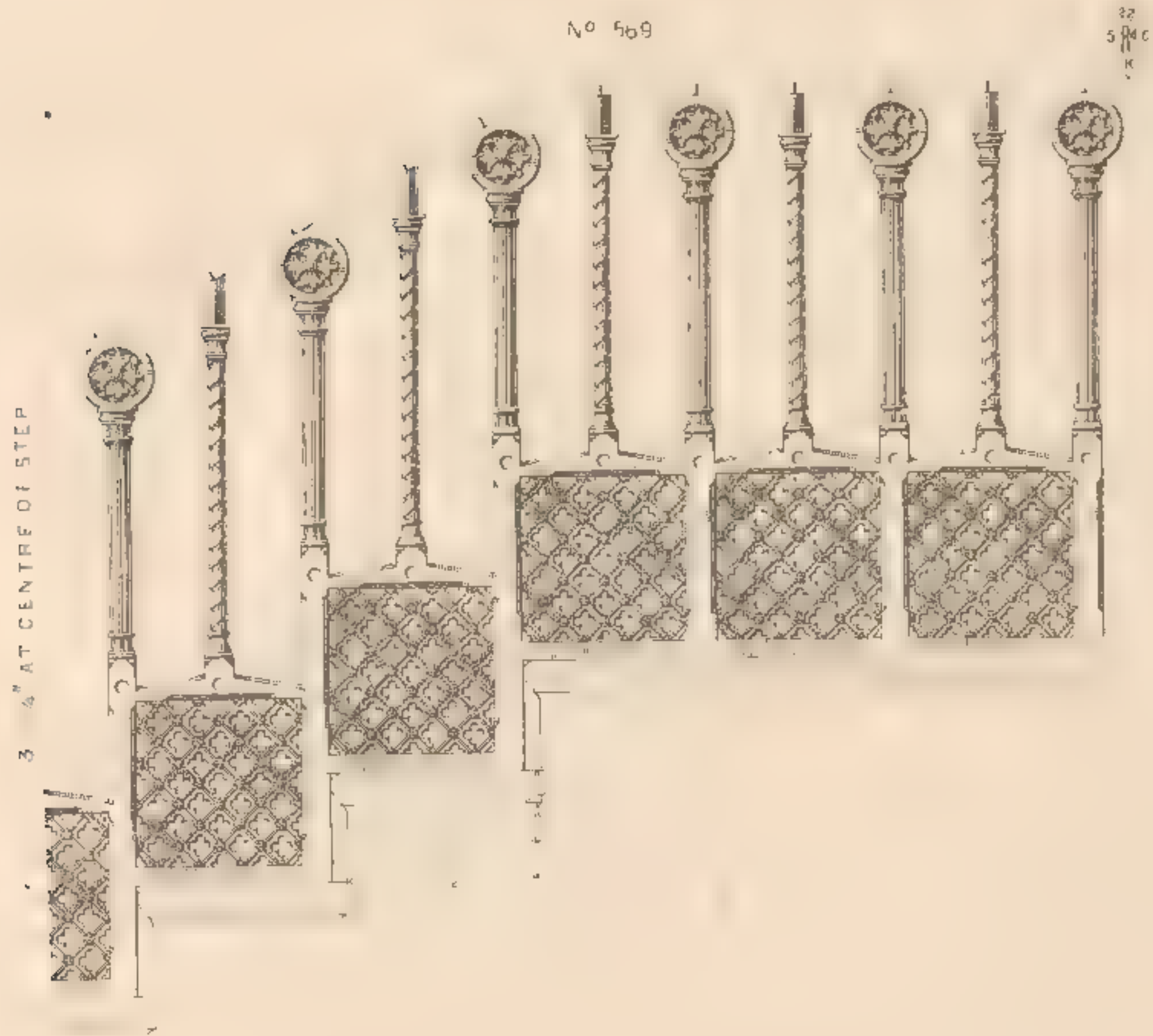
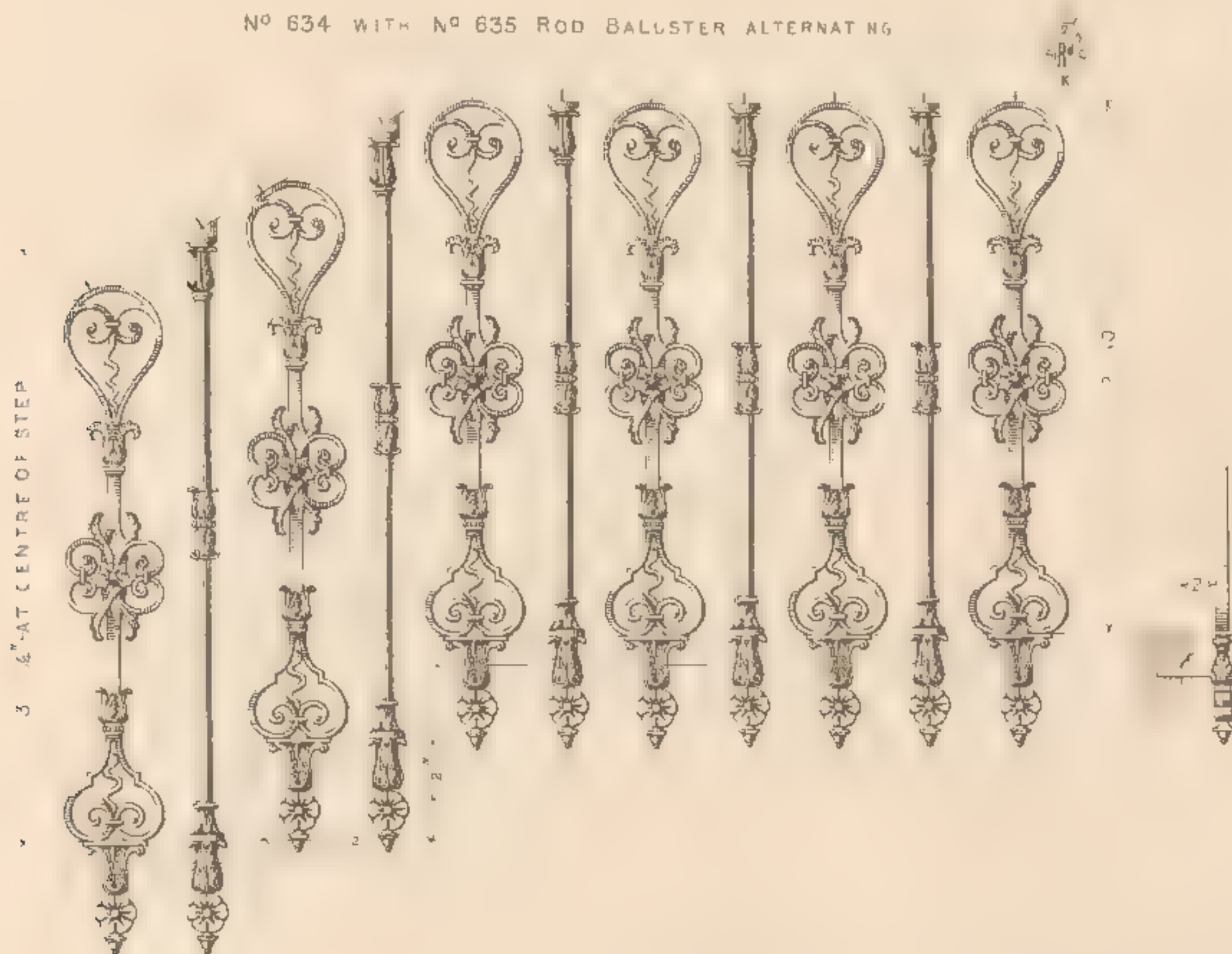


N. 63. OVERHANGING



MACFARLANE'S BALUSTERS AND STAIR RAILING.

Nº 634 WITH Nº 635 ROD BALUSTER ALTERNATING



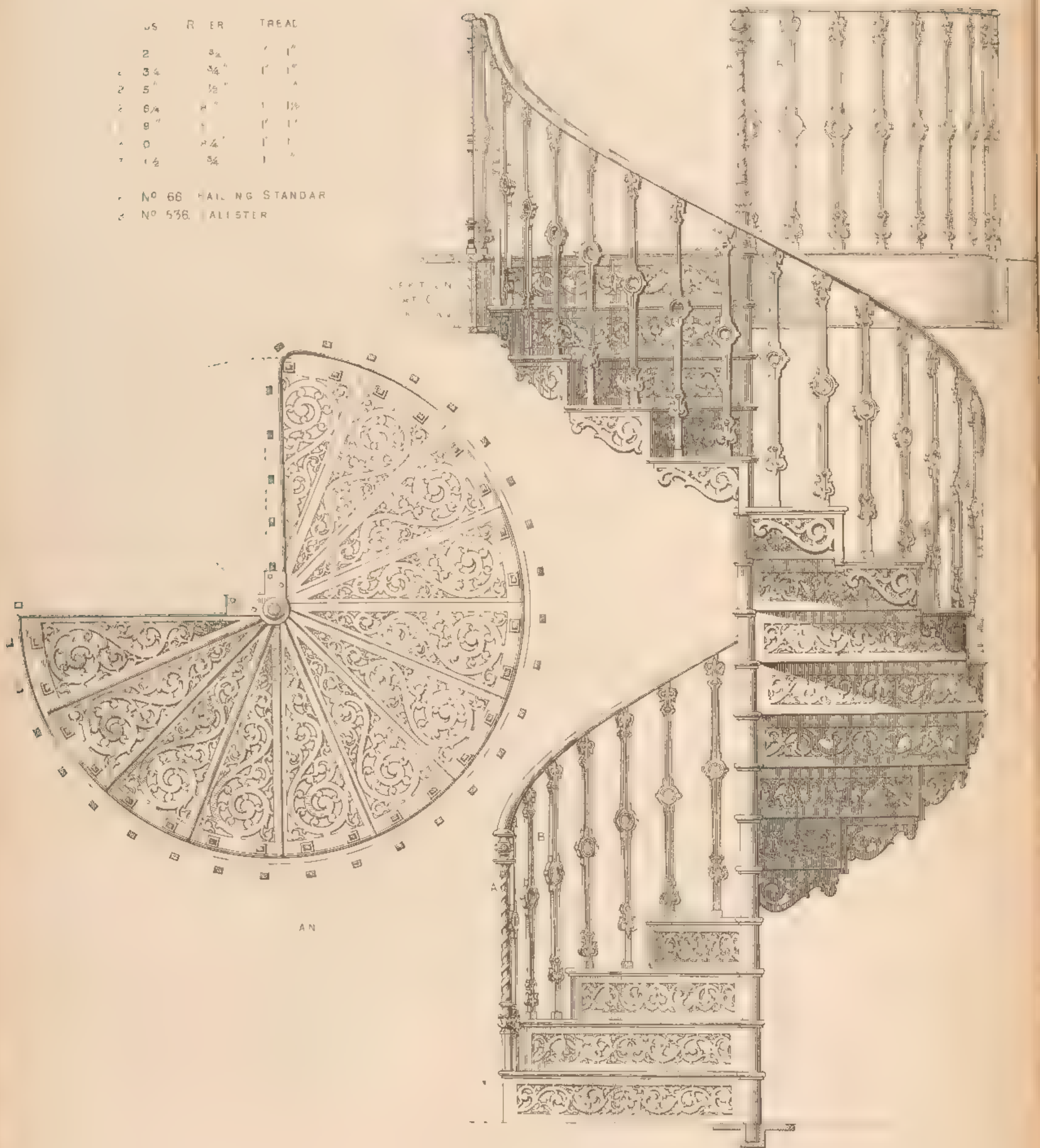
SCALE INCH = 1

NO 639. SPIRAL STAIR

SIZES

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5	3 1/4	1 1/4	1 1/4
6 1/4	3 1/4	1 1/4	1 1/4
9	3 1/4	1 1/4	1 1/4
10	3 1/4	1 1/4	1 1/4
12	3 1/4	1 1/4	1 1/4

NO 66 RAILING STANDARD
NO 536 BALUSTER

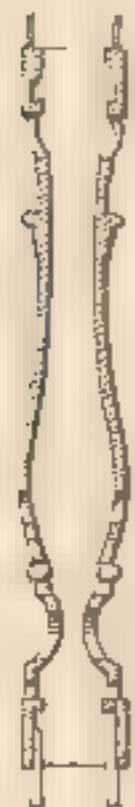
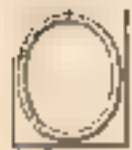
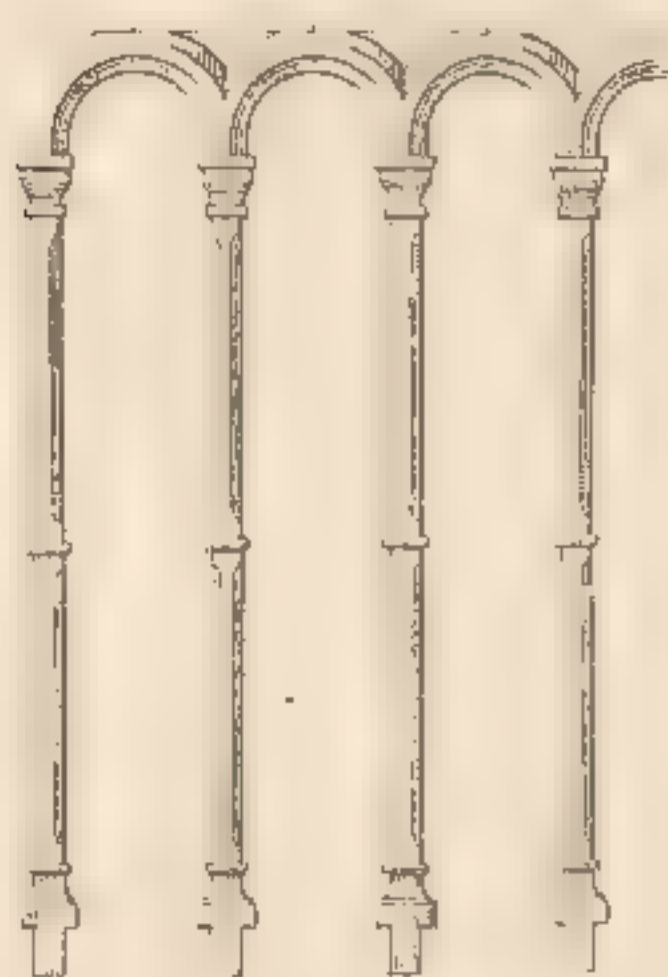
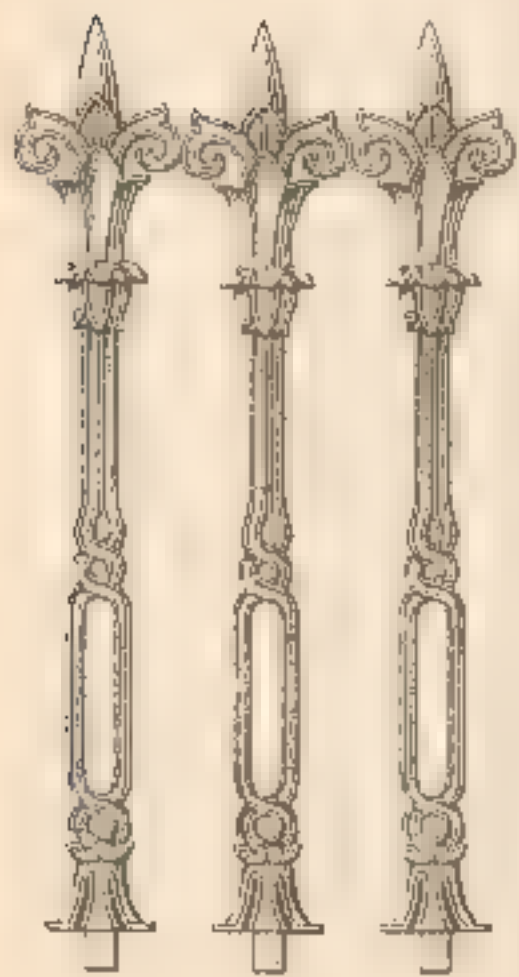
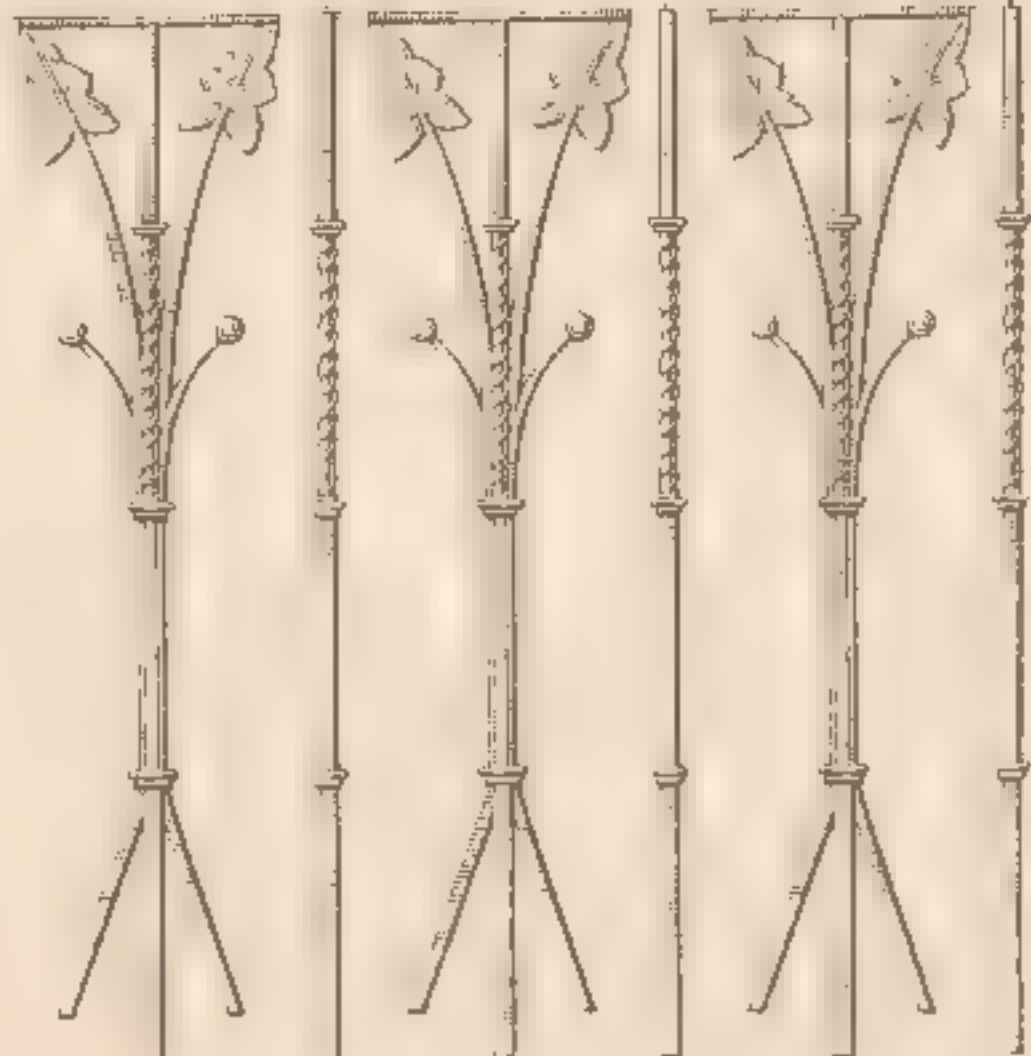


SCALE 3/4 INCH = FOOT

MACFARLANE'S BALUSTERS AND STAIR RAILING.

N^o 46N^o 678N^o 42

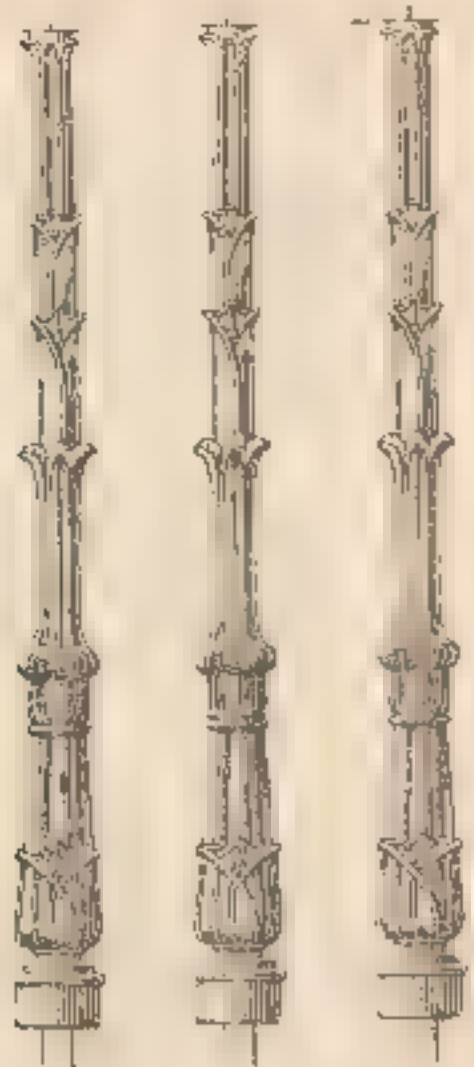
PLAN A A

N^o 605N^o 376N^o 377N^o 609N^o 38N^o 251N^o 649

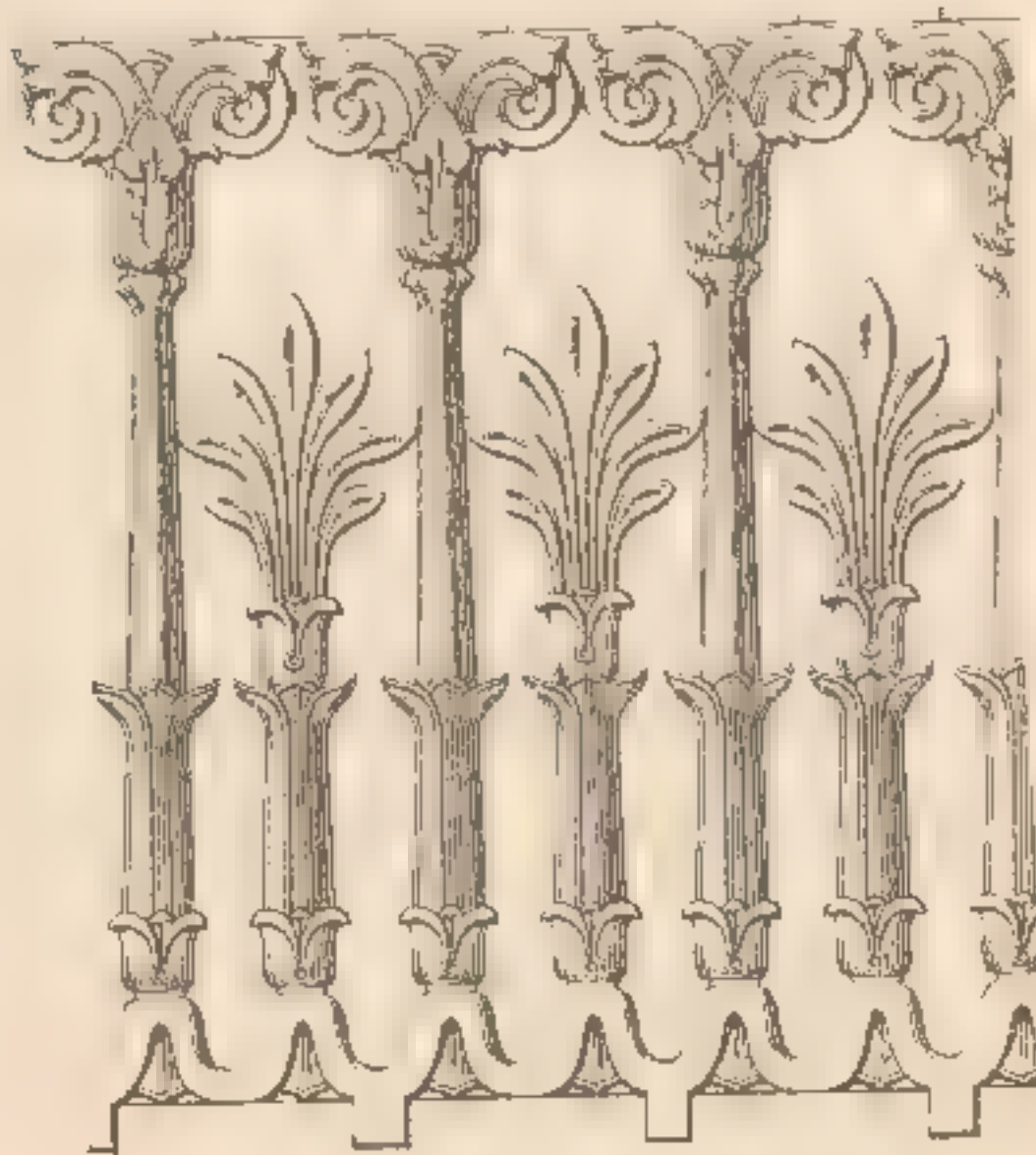
SCALE 1 INCH = 10"

MACFARLANE'S BALUSTERS AND STAIR RAILING.

Nº 695



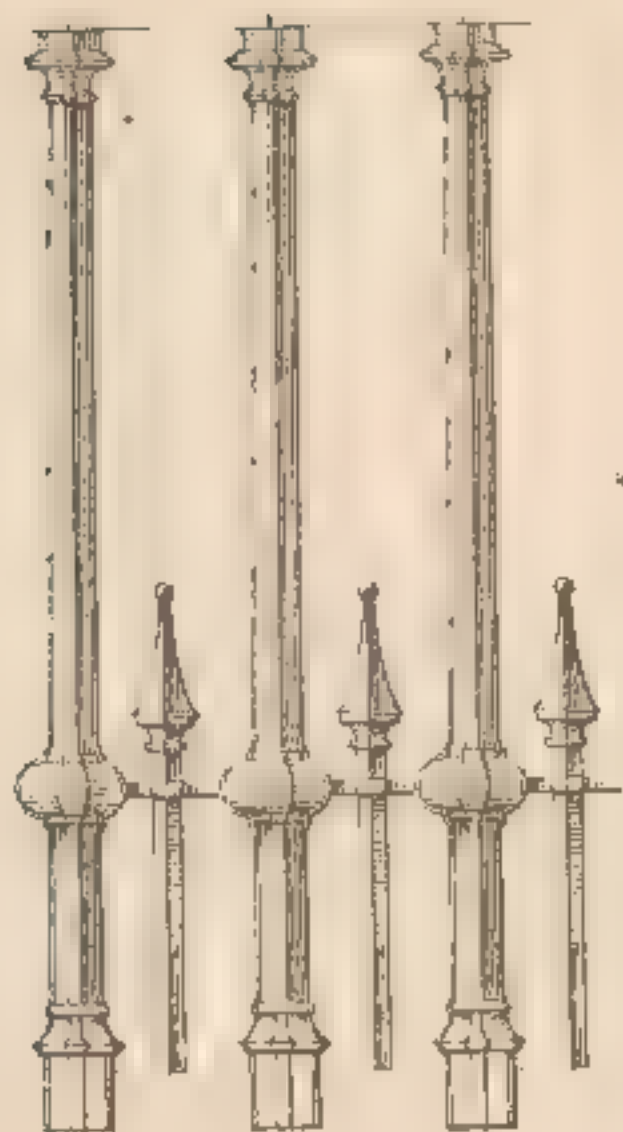
Nº 382



Nº 383



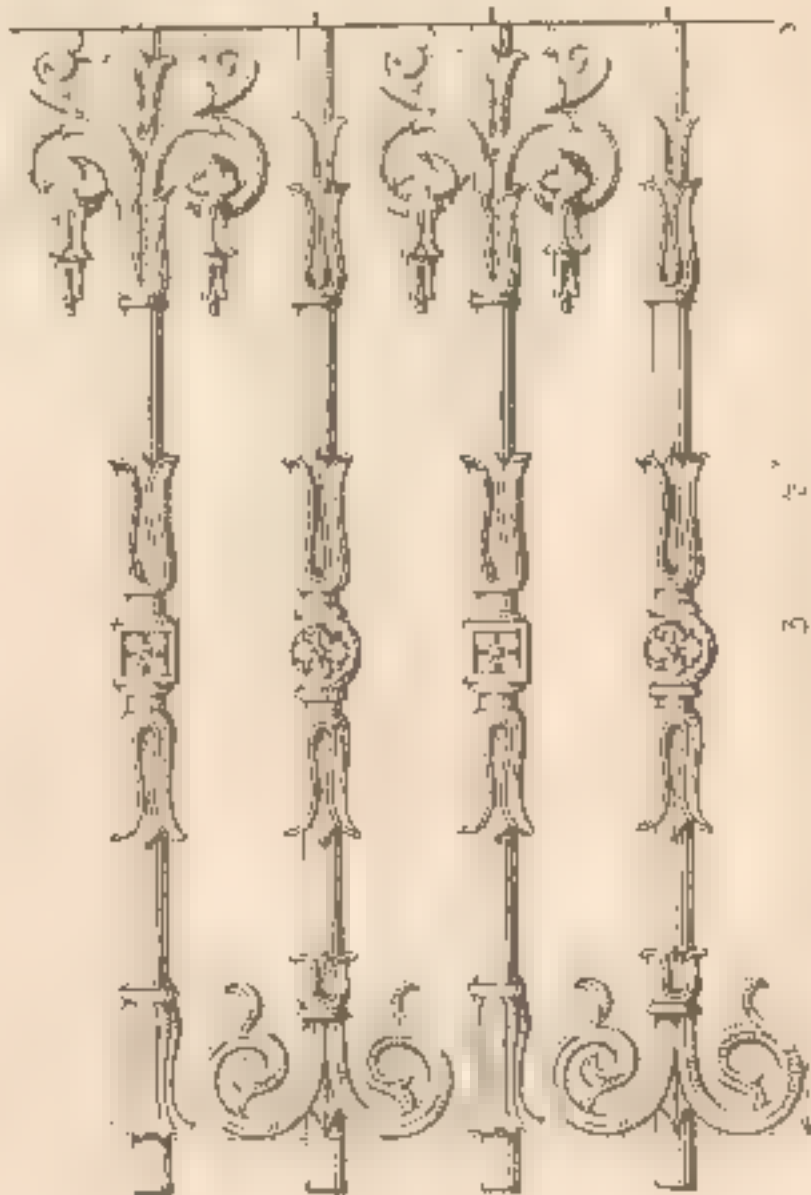
Nº 660



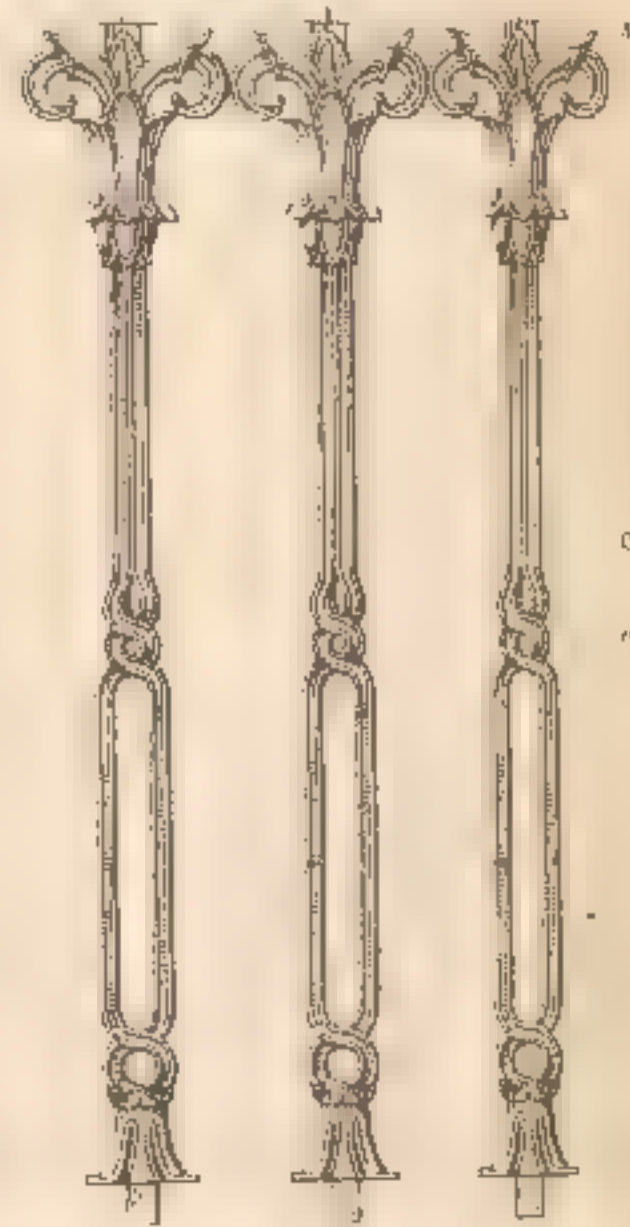
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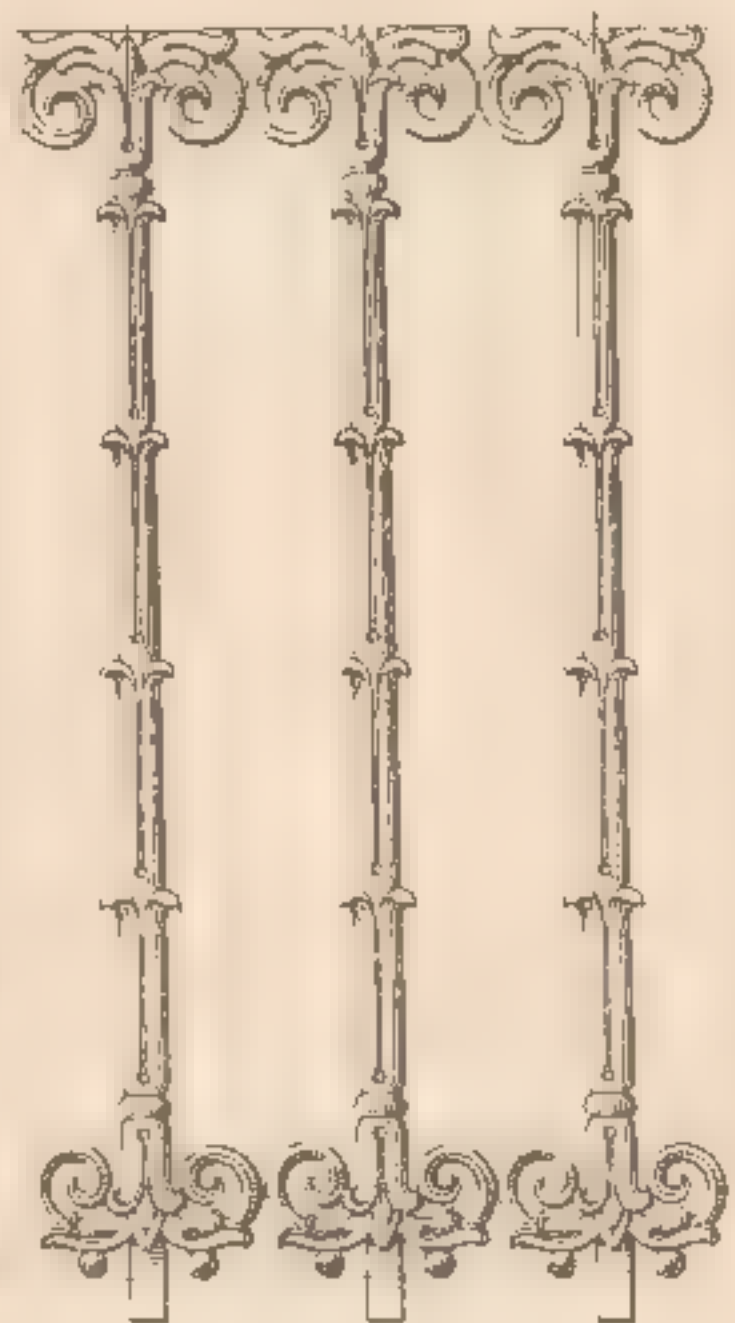
Nº 385



605



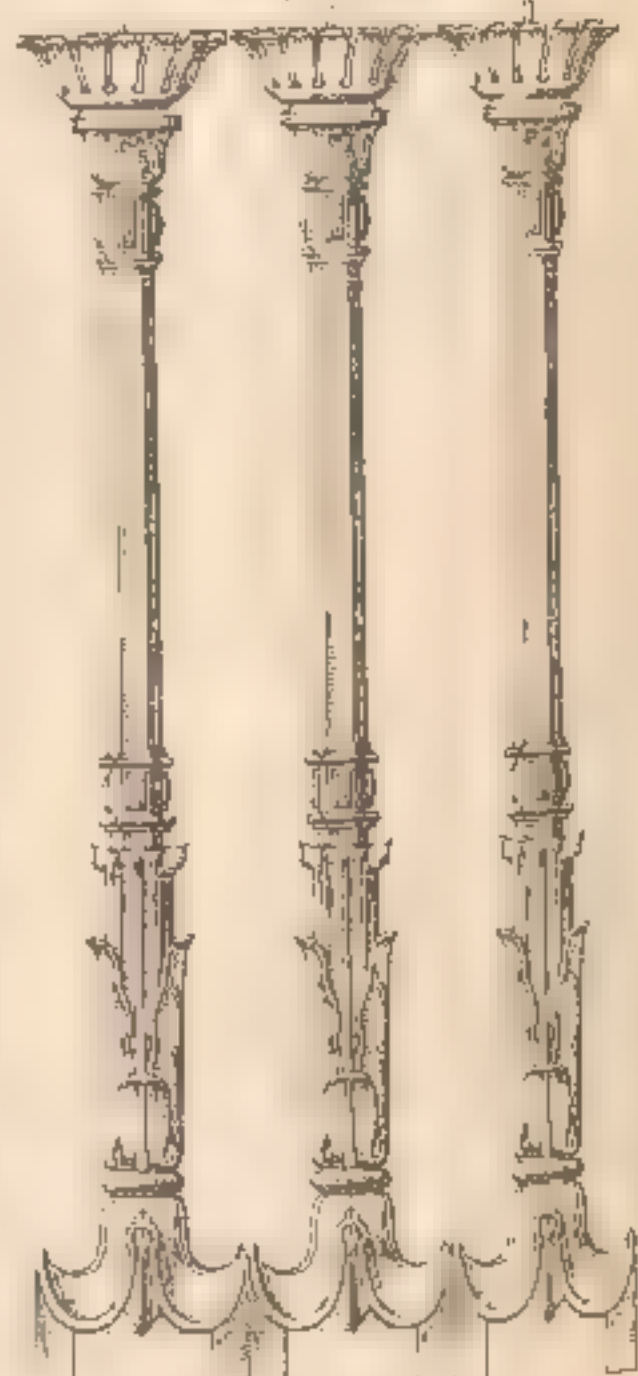
Nº 387



Nº 386



Nº 680

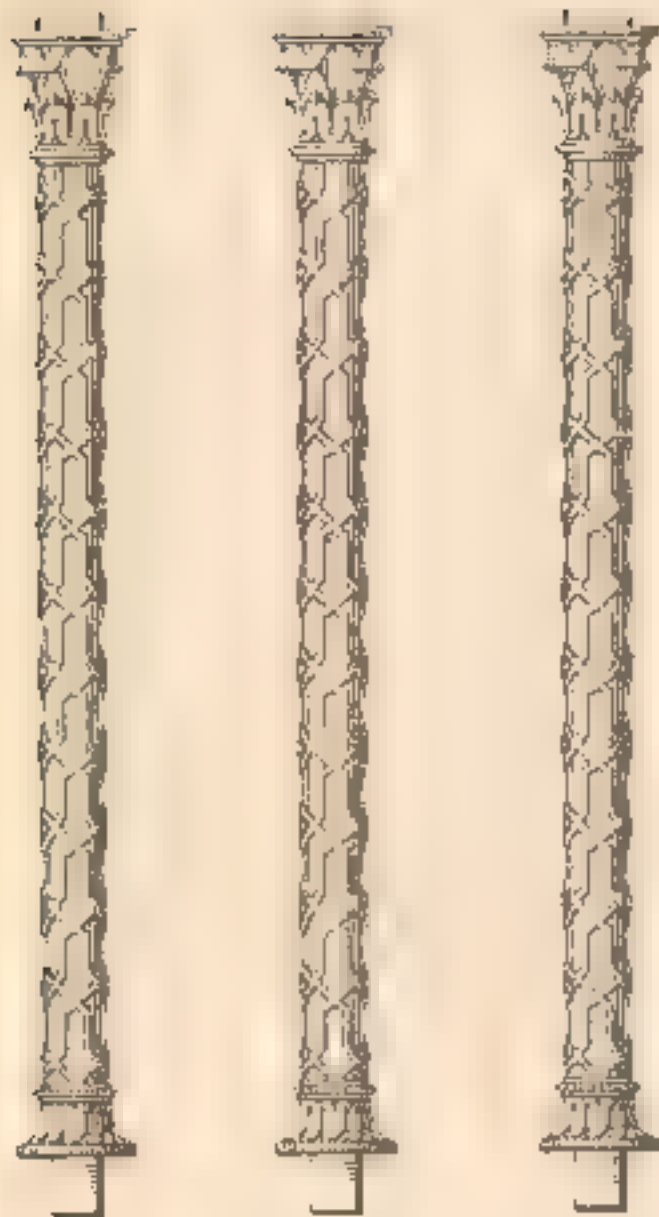


Nº 388



MACFARLANES BALUSTERS AND STAIR RAILING

Nº 609



3 2

Nº 682

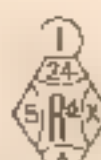
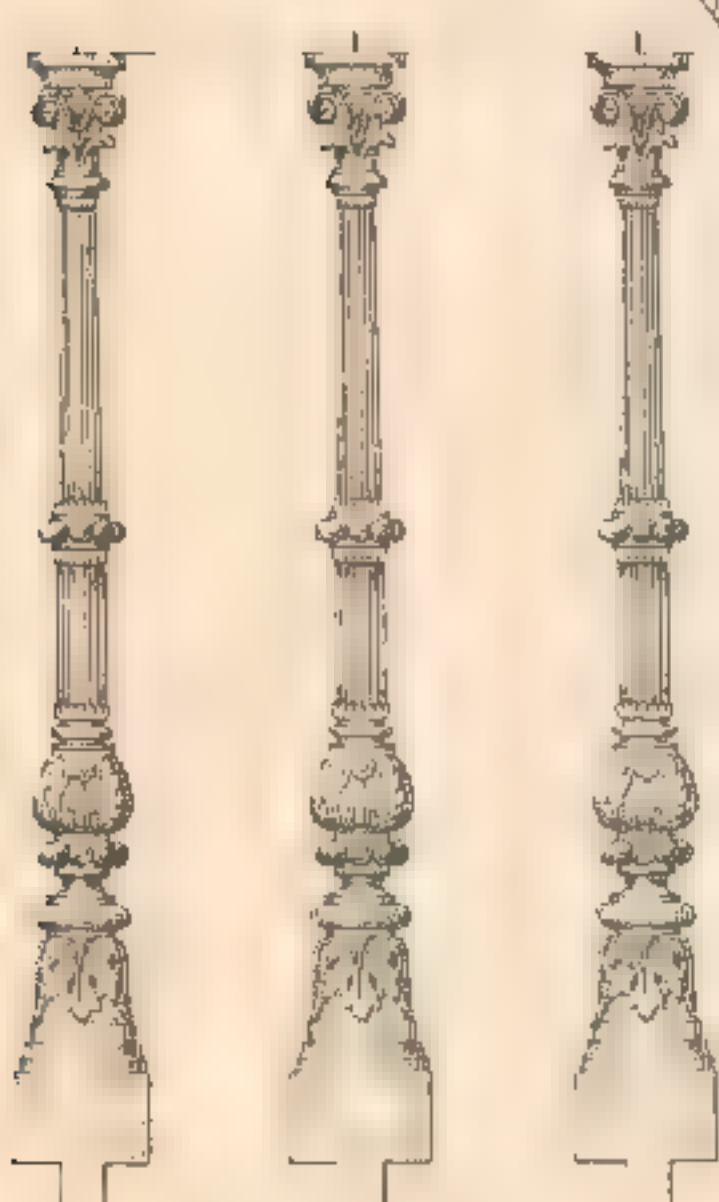


2 2

Nº 683

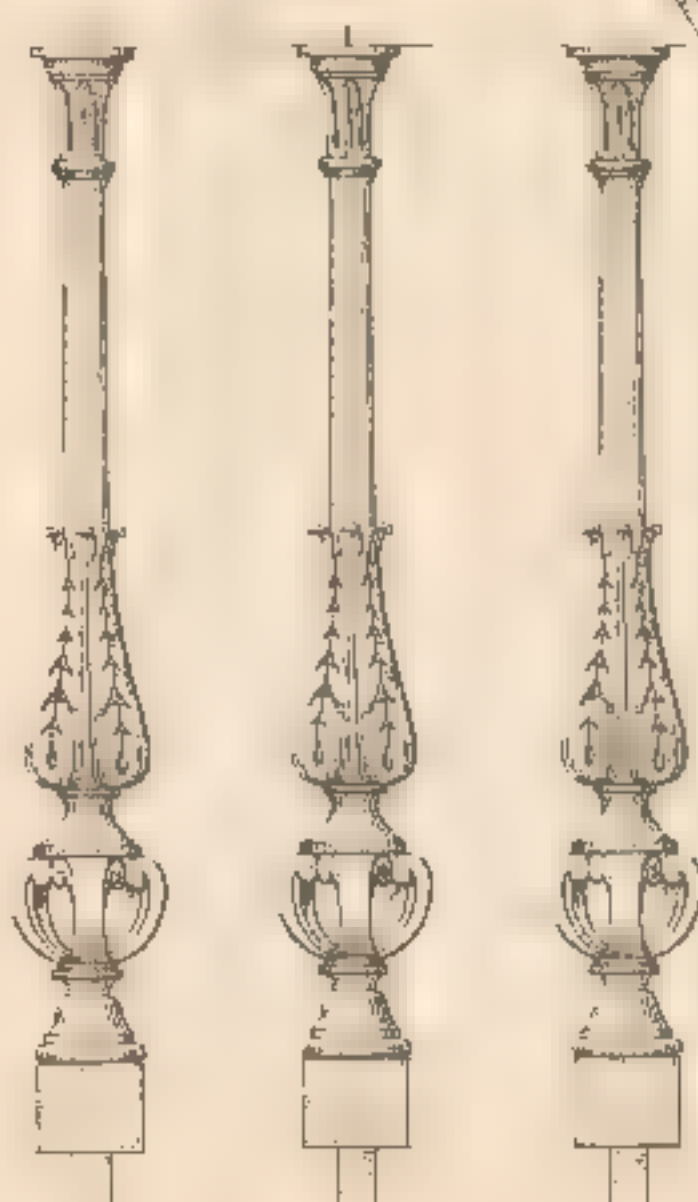


Nº 664

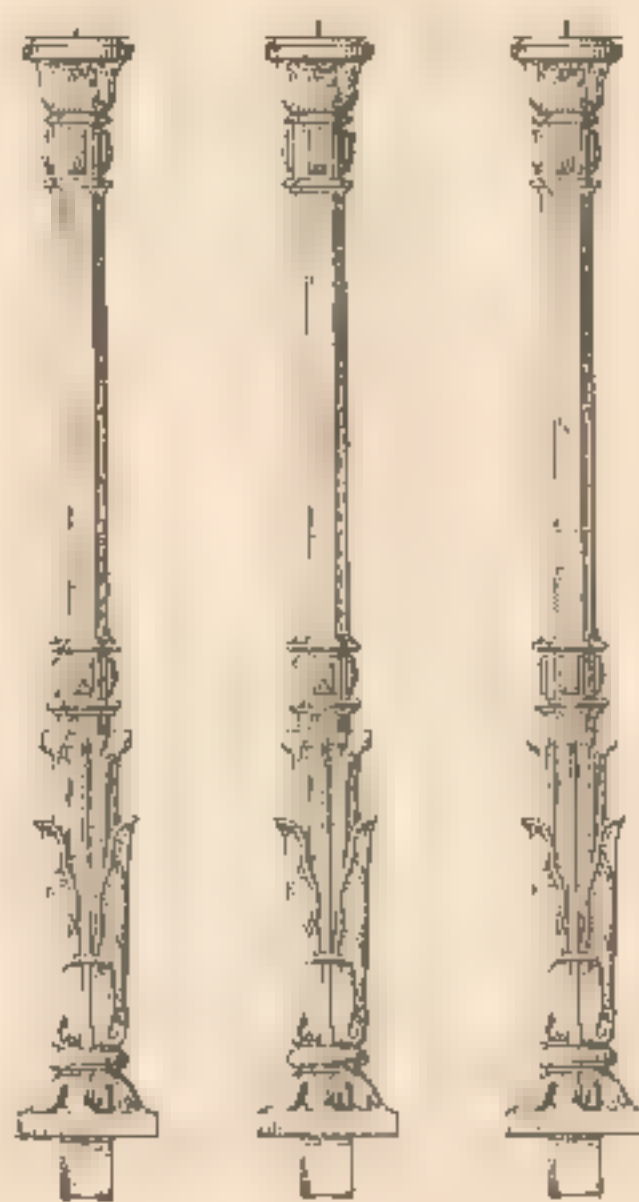


2 2

Nº 670



Nº 680



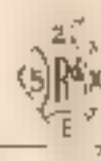
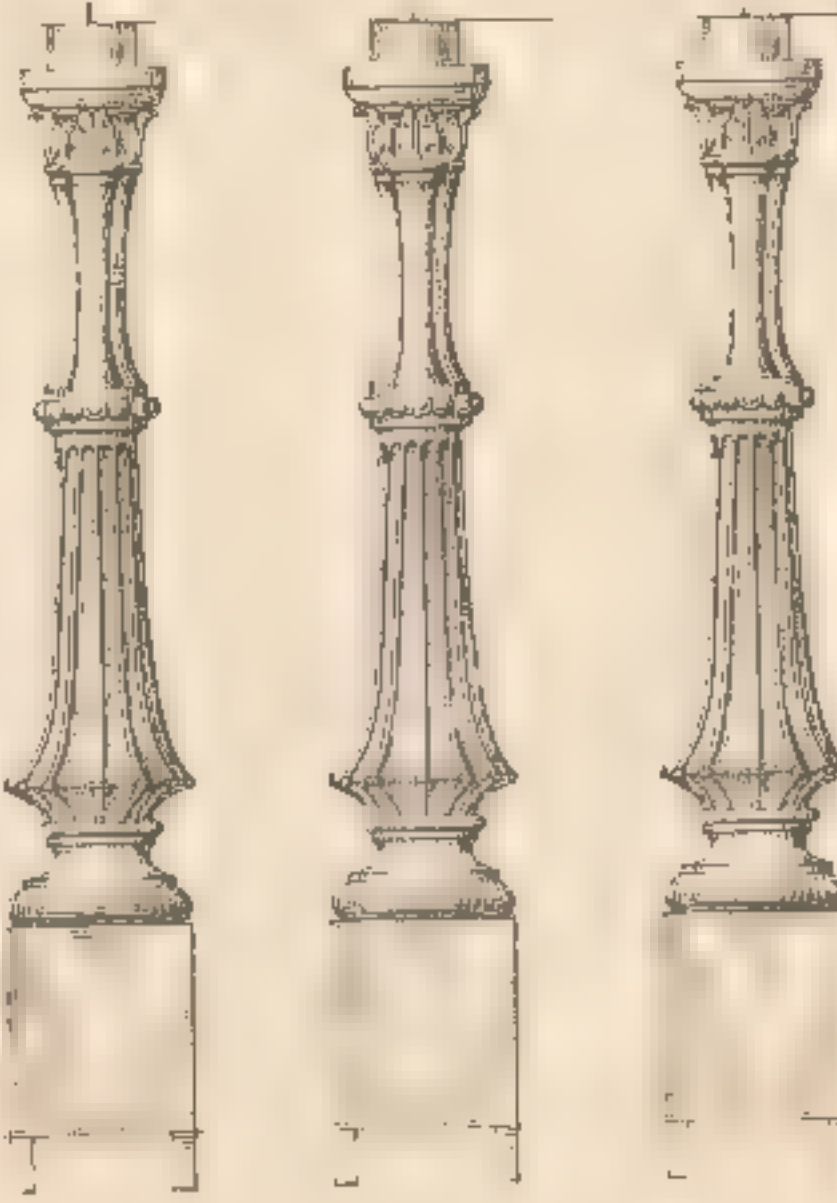
2 2

Nº 679



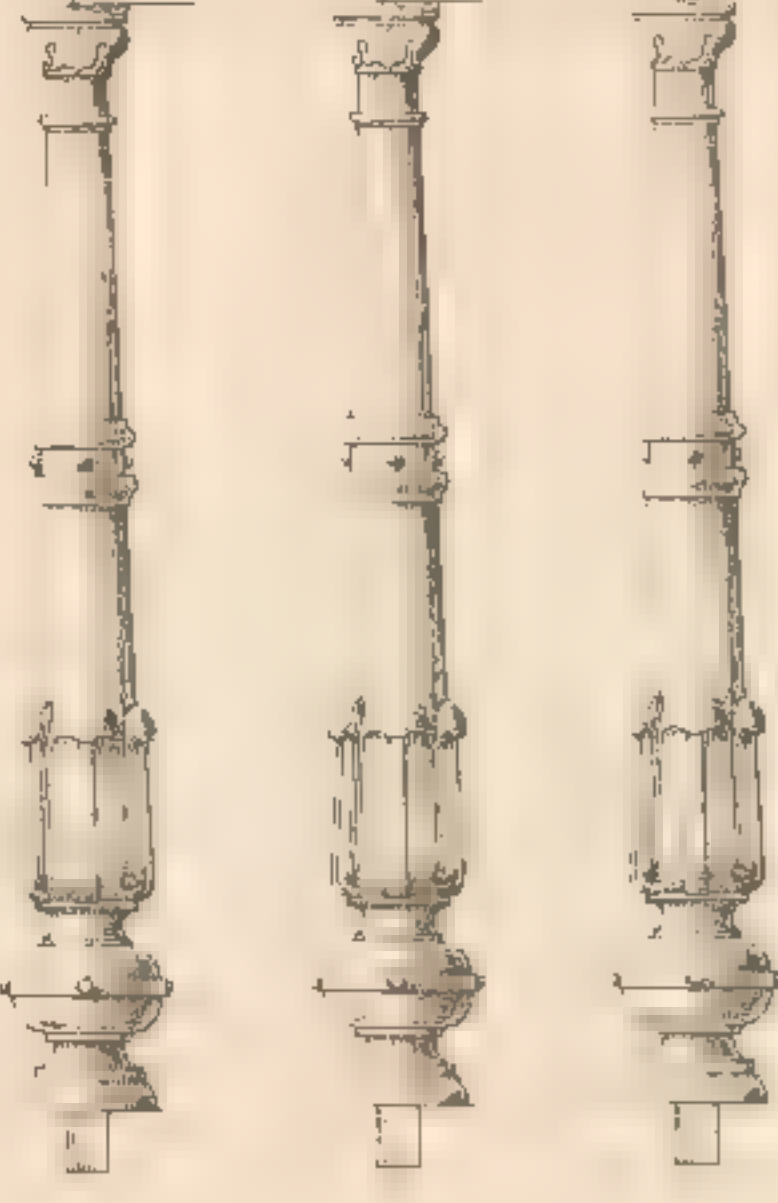
2 2

Nº 674



3

Nº 673



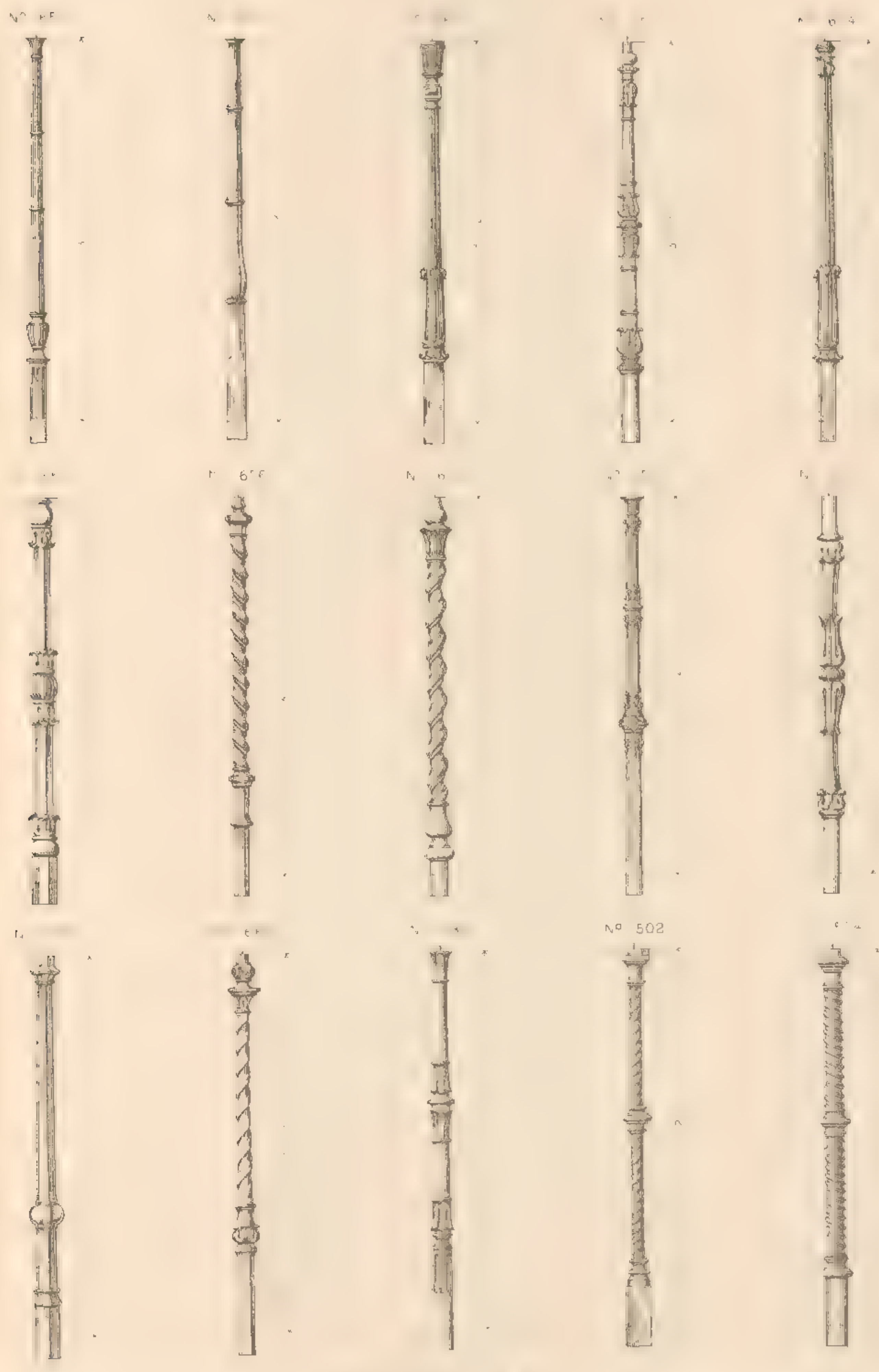
2 2

SCALE 1 INCH

MACFARLANE'S RAILING STANDARDS



MACFARLANE'S RAILING STANDARDS



No 502

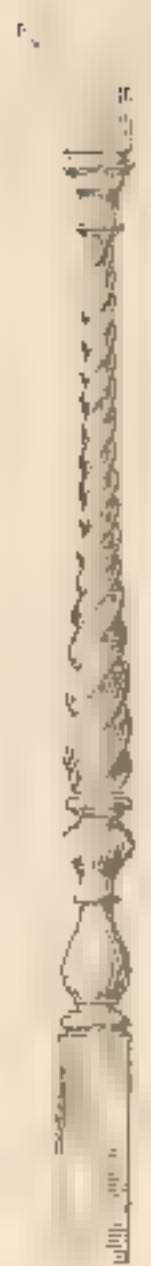
MACFARLANE'S RAILING STANDARDS



No 528



3 2



No 532



3 2



No 652



3 2



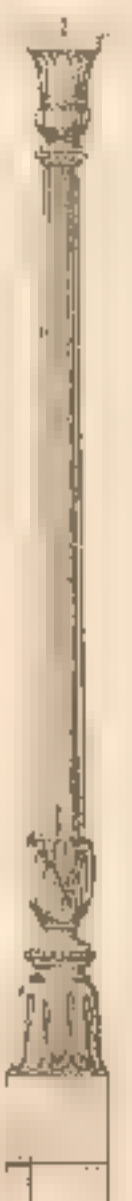
No 662



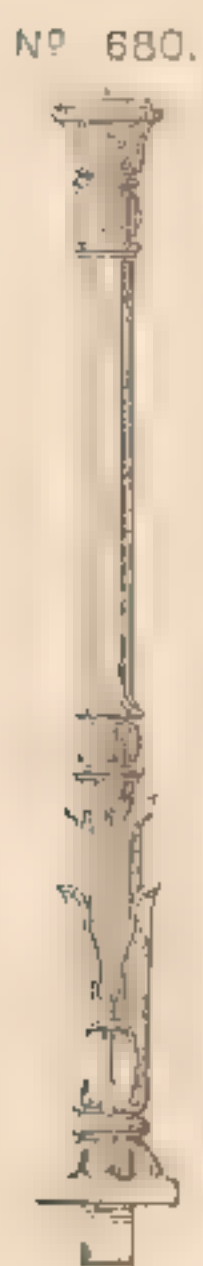
3 2



No 663



3 2



No 680



No 681

$\frac{5}{8} \times \frac{3}{4}$

3 2



No 682

3 2



No 683

3 2



No 684

3 2

SCALE 1 INCH = 1 FOOT

MACFARLANE'S RAILING STANDARDS

Nº 668



$\frac{1}{8}$
R
R

Nº 670



$\frac{1}{8}$
R
R

Nº 671



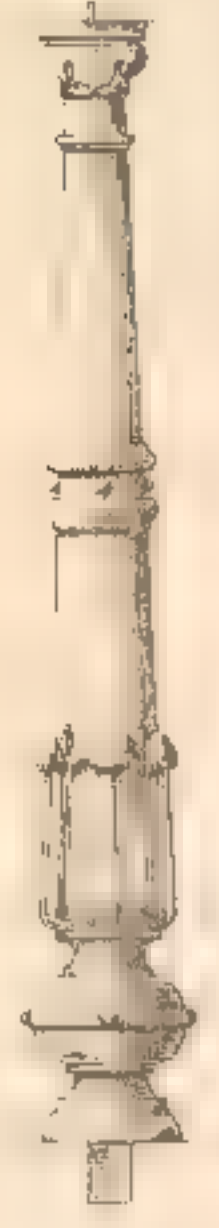
$\frac{1}{8}$
R
R

Nº 672



$\frac{1}{8}$
R
R

Nº 673



Nº 674



$\frac{1}{8}$
R
R

Nº 675



$\frac{1}{8}$
R
R

Nº 676



$\frac{1}{8}$
R
R



$\frac{1}{8}$
R
R



$\frac{1}{8}$
R
R

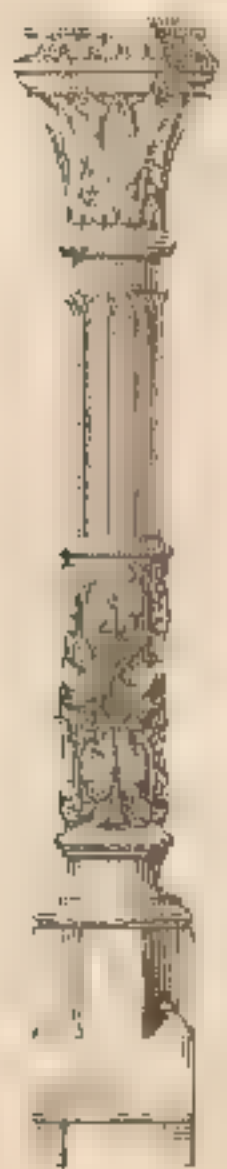


$\frac{1}{8}$
R
R

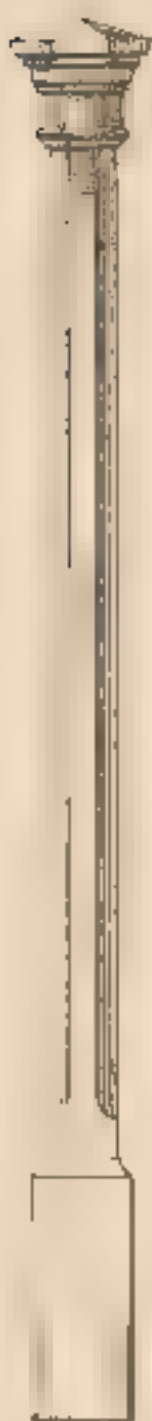
SCALE 1 INCH =

MACFARLANE'S RAILING STANDARDS.

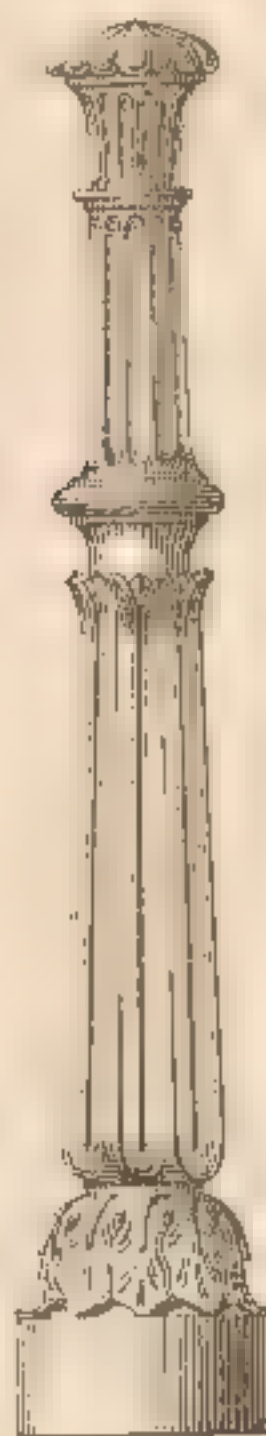
Nº 685



Nº 687



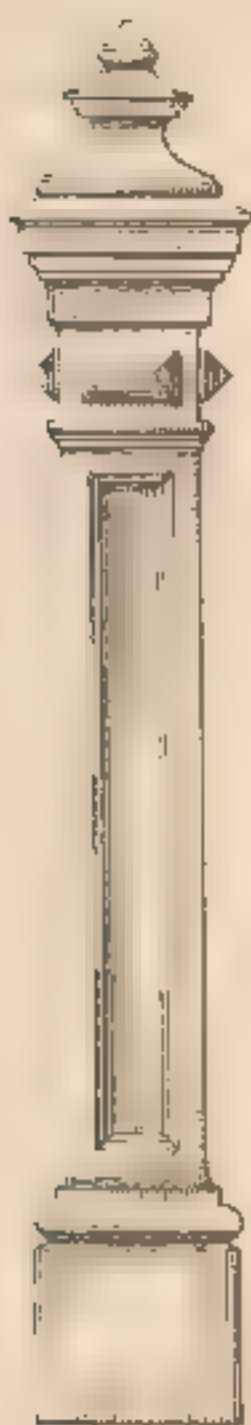
Nº 688.



Nº 684



Nº 690



Nº 69



Nº 692



Nº 691



SCALE 1 INCH = 1 FOOT

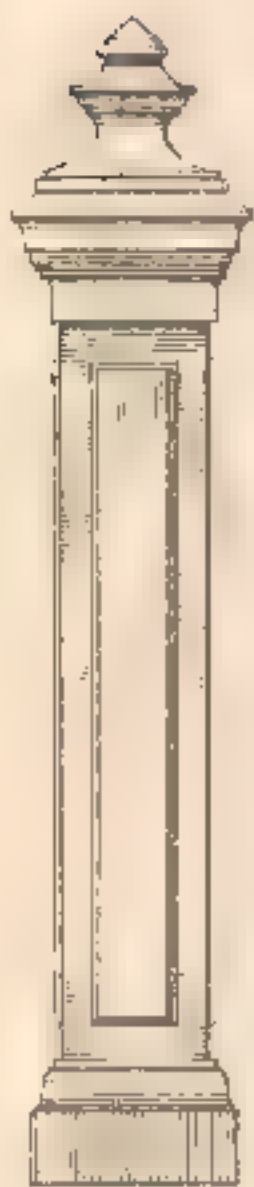
MACFARLANE'S RAILING STANDARDS.

Nº 68



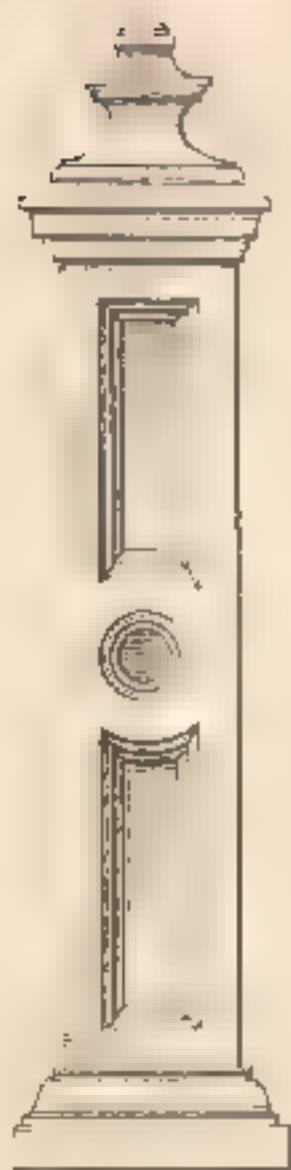
3 2

Nº 694



3 3

Nº 689



3 4 2

Nº 26



3 1

Nº 709



3 5 2

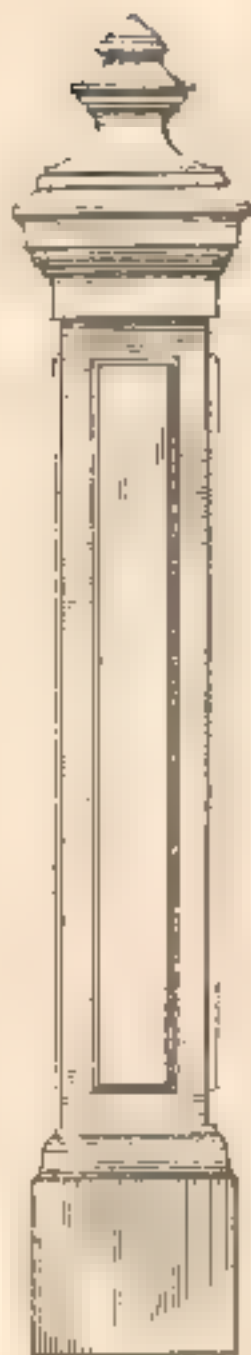
0 3 4

Nº 68



3

Nº 694



3

Nº 208



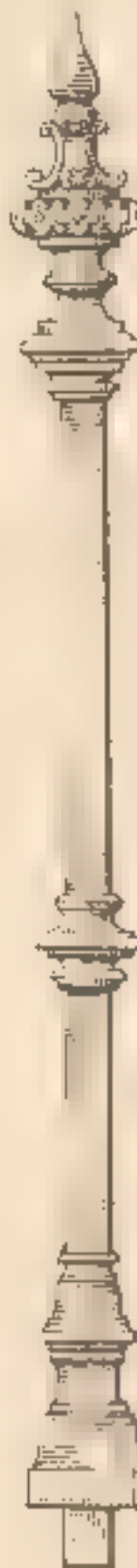
3

Nº 24



4 2

Nº 44



4 6

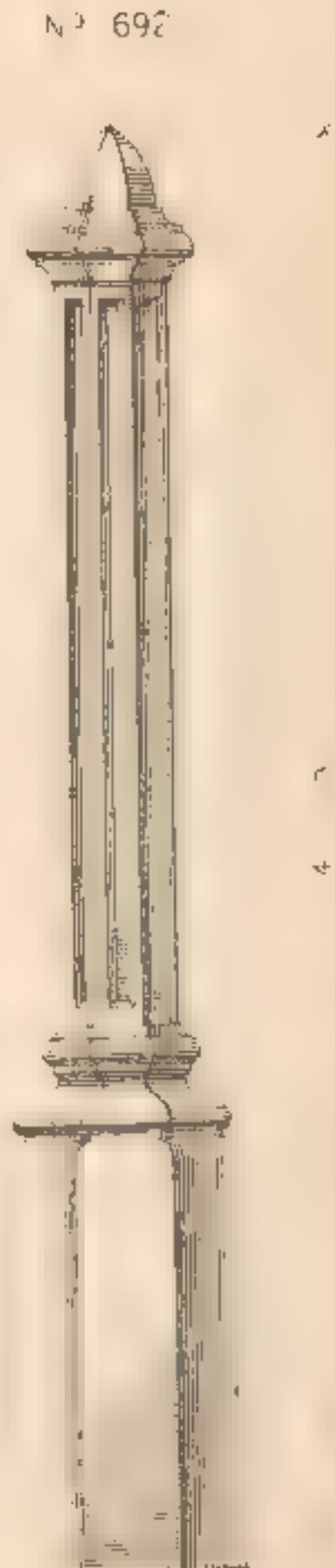
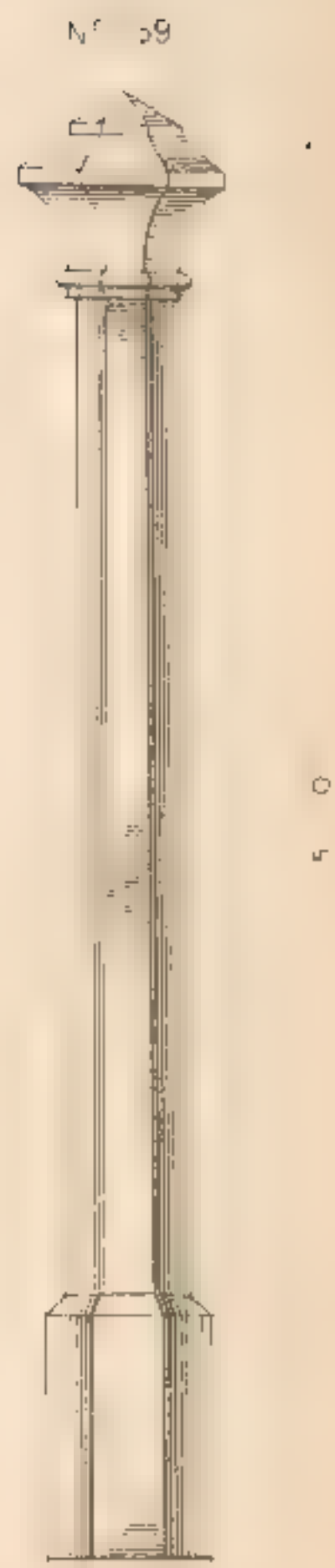
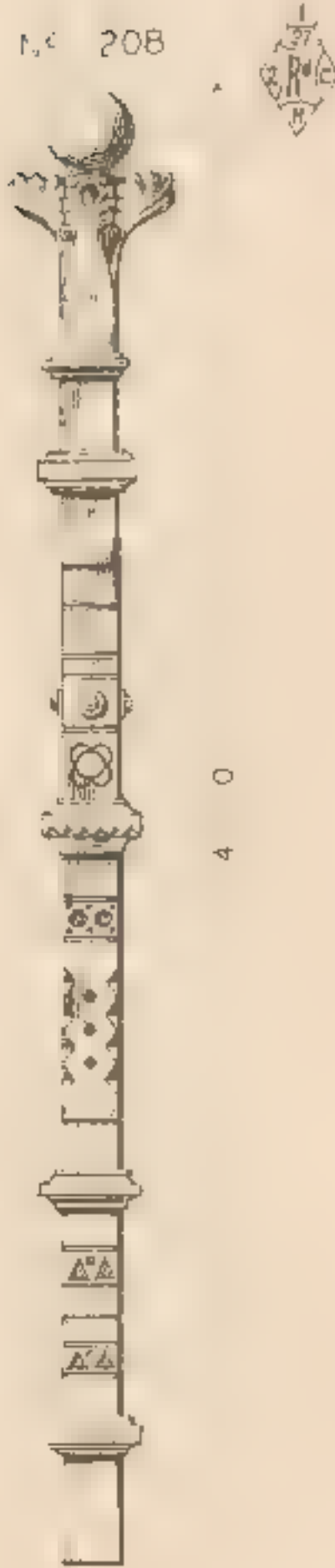
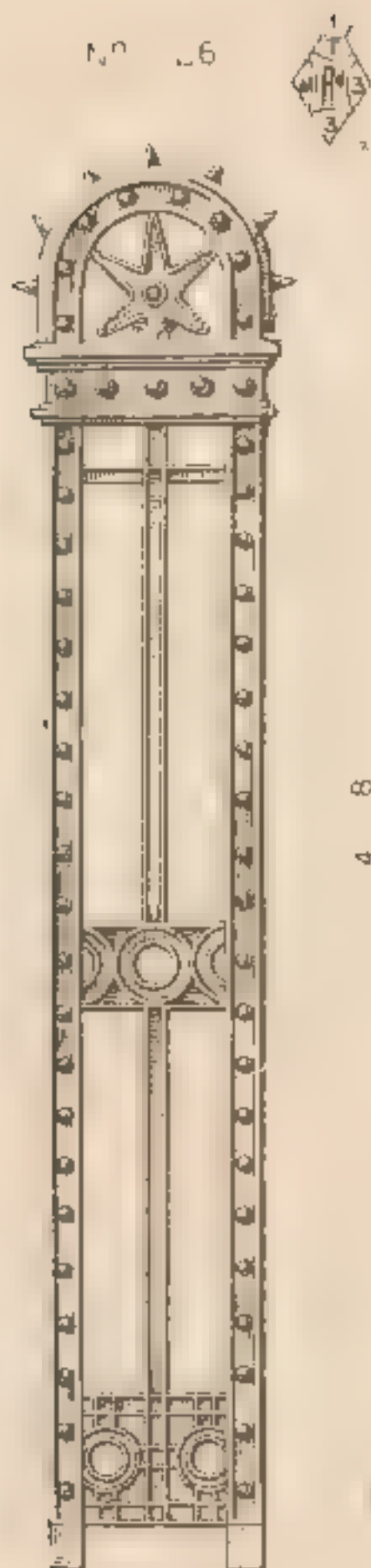
Nº 70



4 6

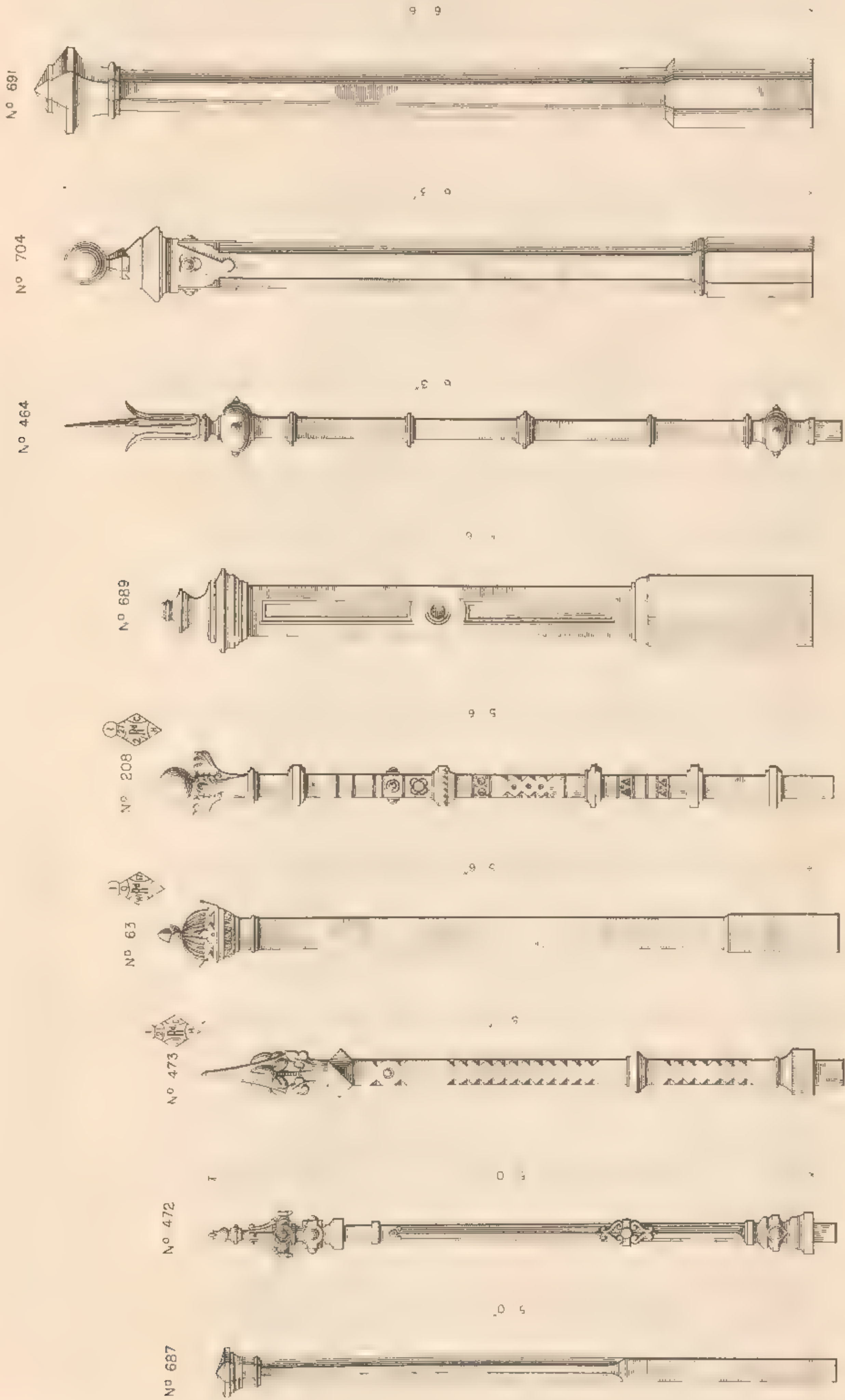
SCALE 1 INCH — FOOT

MACFARLANE'S RAILING STANDARDS.



SCALE INCH = FEET

MACFARLANE'S RAILING STANDARDS.



Nº 691

Nº 704

Nº 464

Nº 689

Nº 208

Nº 63

Nº 473

Nº 472

Nº 687

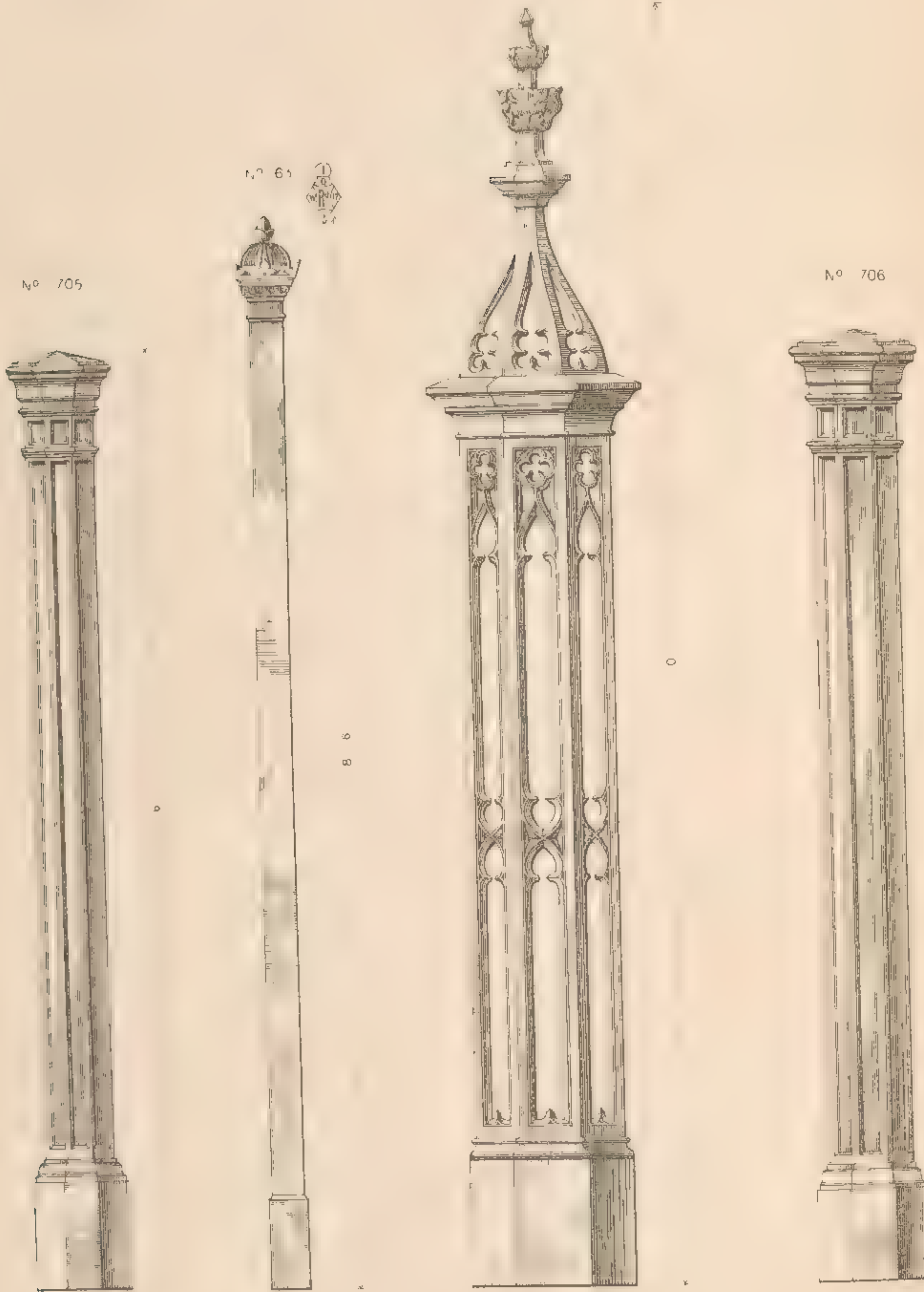
MACFARLANE'S RAILING STANDARDS.

No 70

No 61

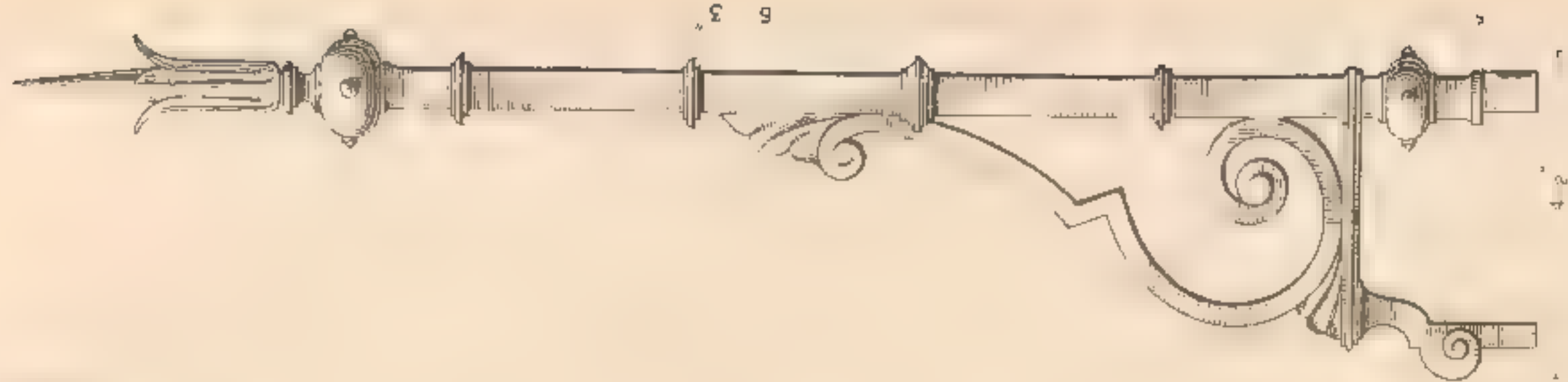
No 705

No 706

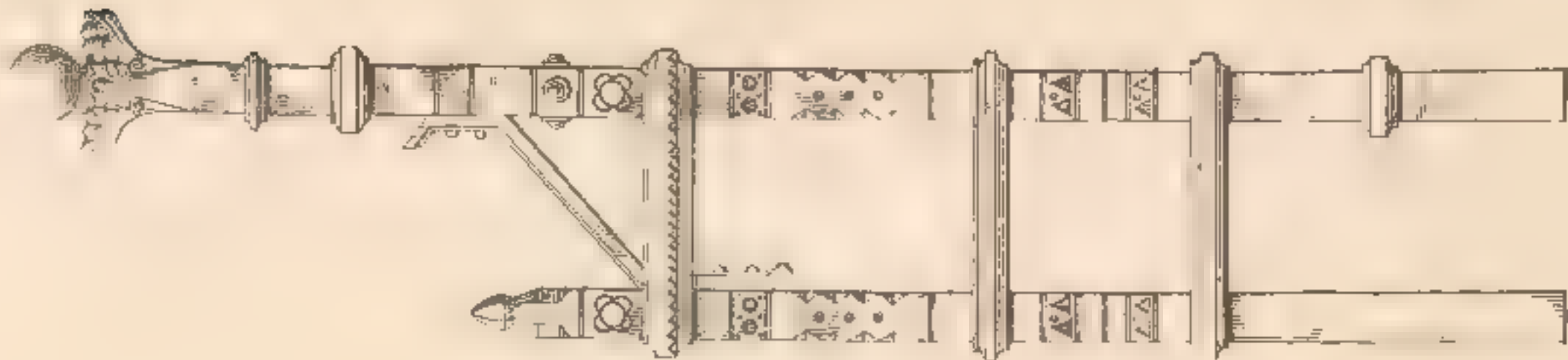


SCALE 1 INCH = 1 FOOT

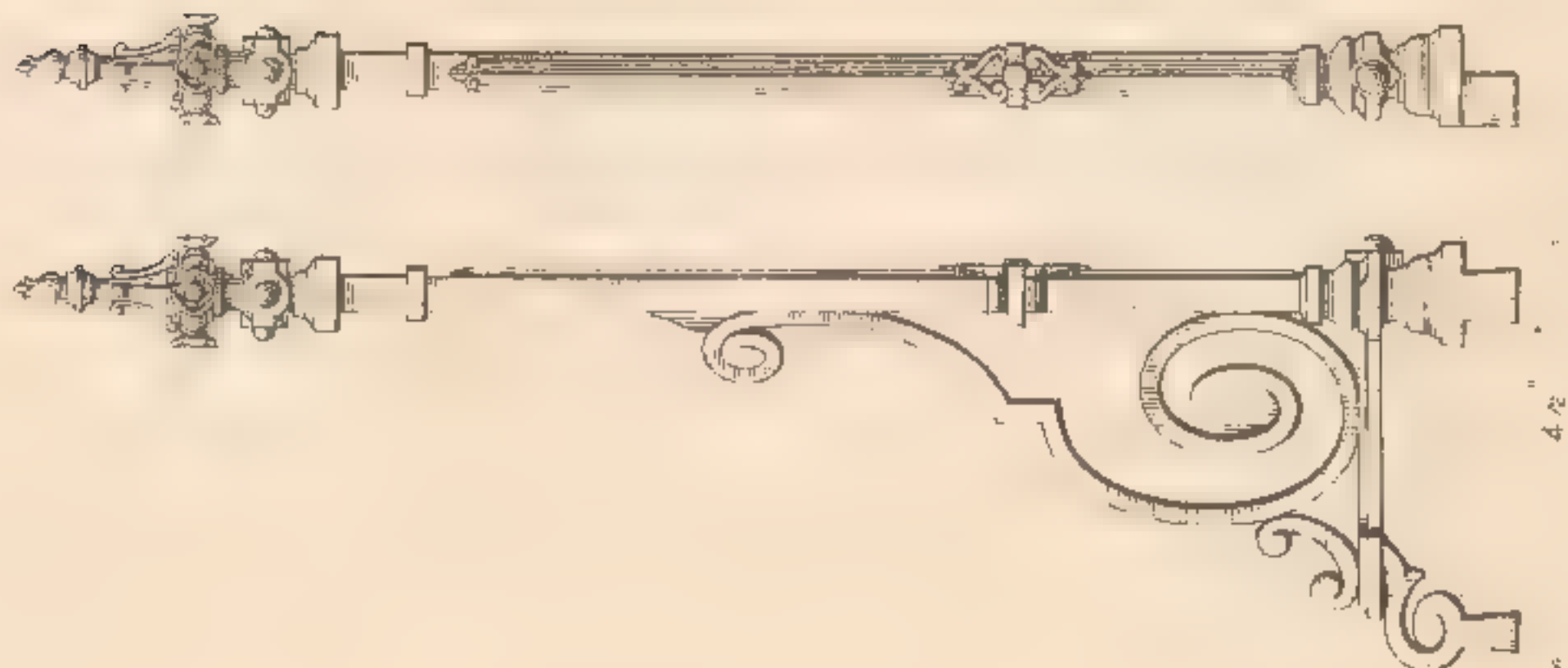
N^o 464



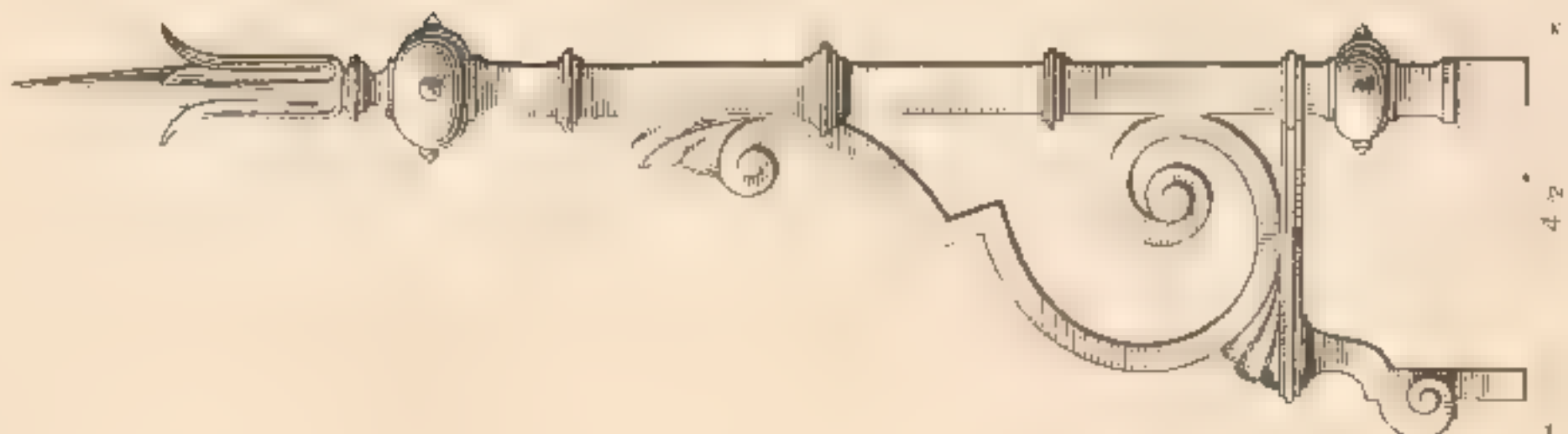
N^o 28



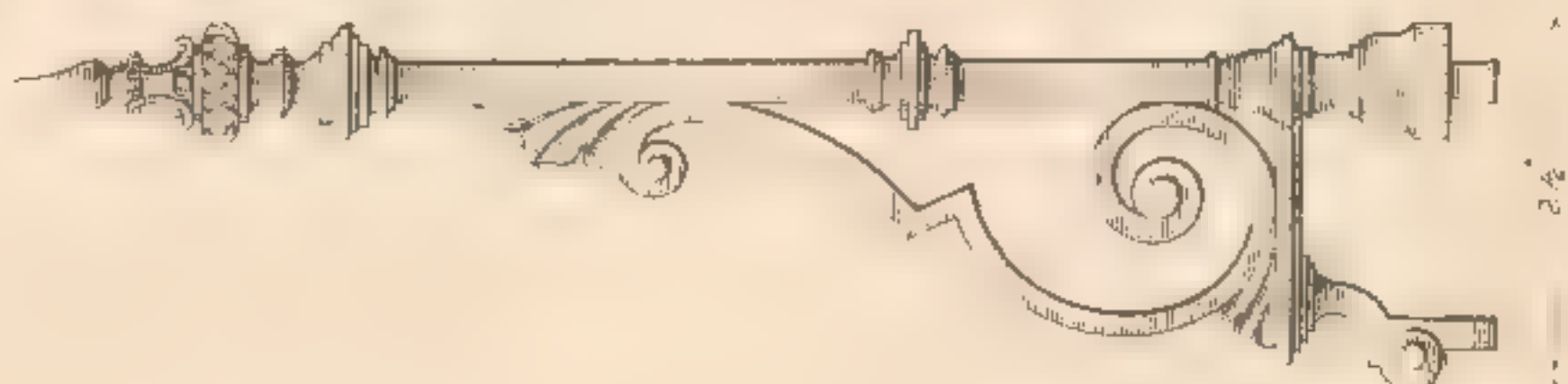
N^o 472



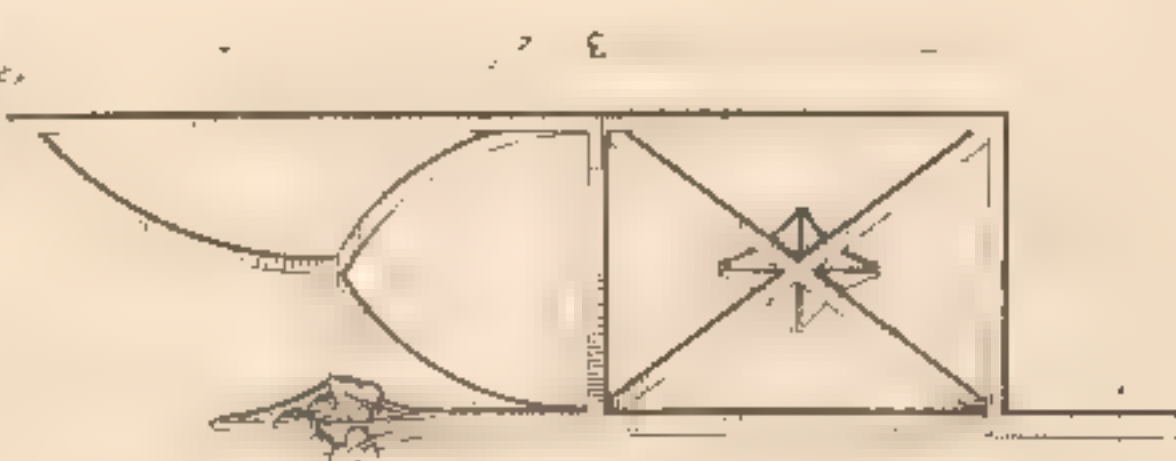
N^o 464



N^o 474



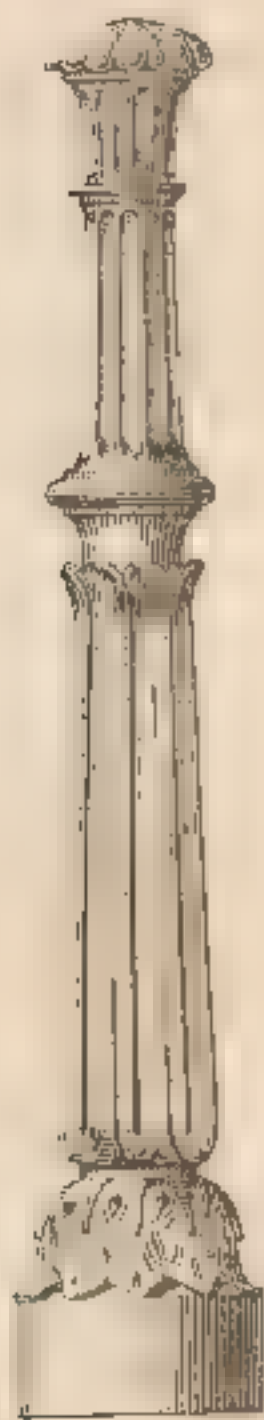
N^o 473



SCALE 1 INCH = 1 FOOT

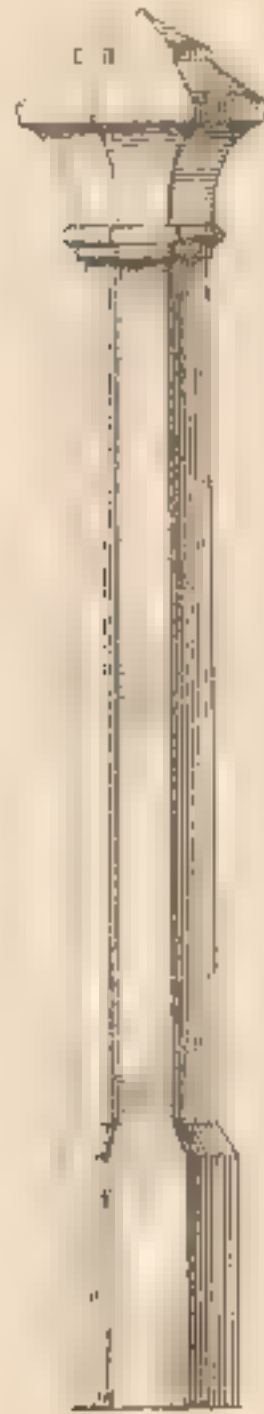
MACFARLANE'S ROAD POSTS.

Nº 600



4 0

Nº 601



4 0

Nº 602



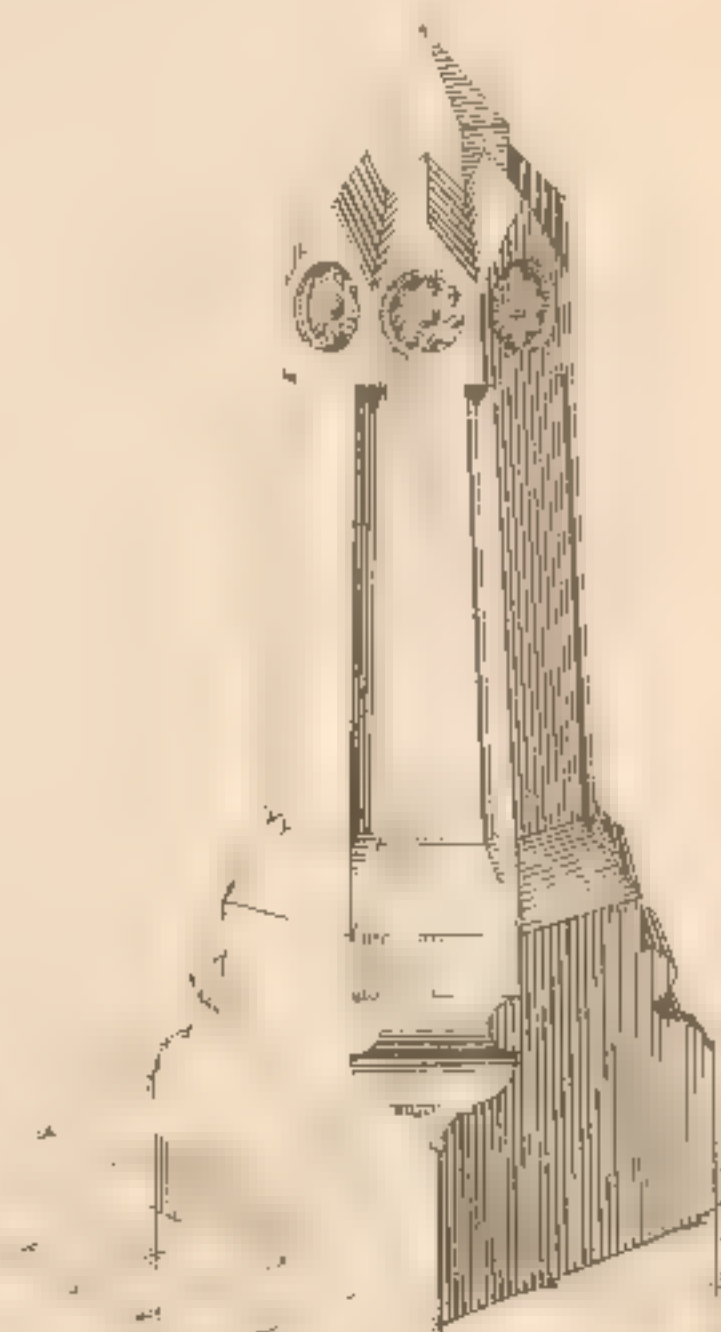
4 0

MACFARLANE'S GUARD POSTS.

Nº 2



5 2



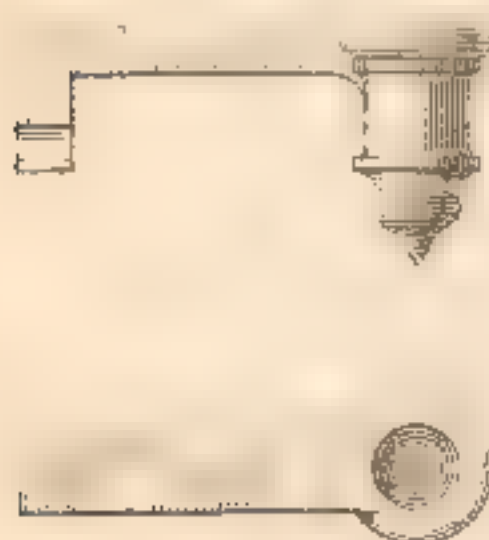
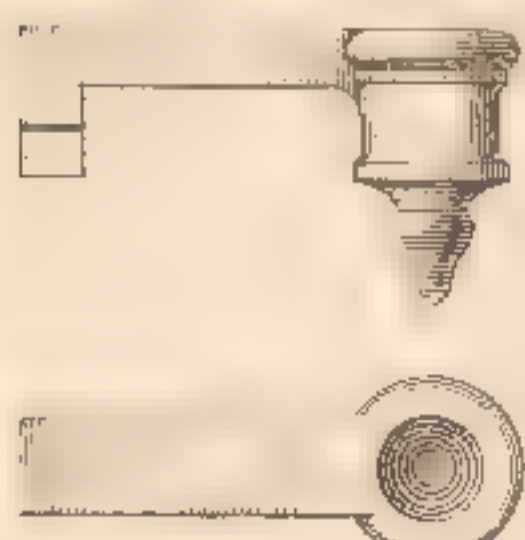
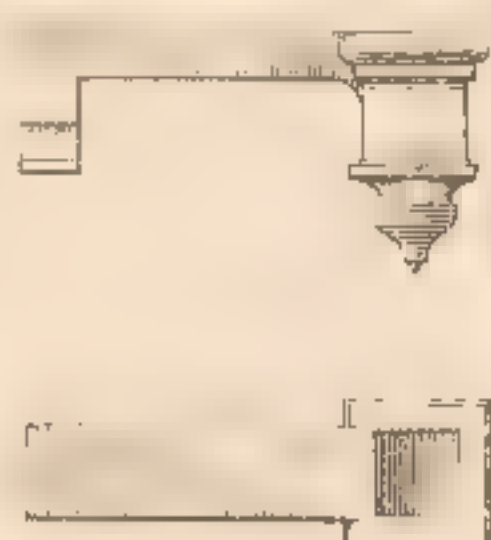
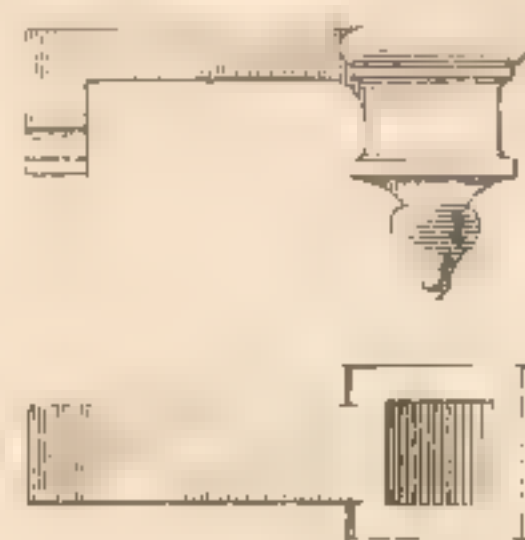
6 2

SCALE INCH = FOOT

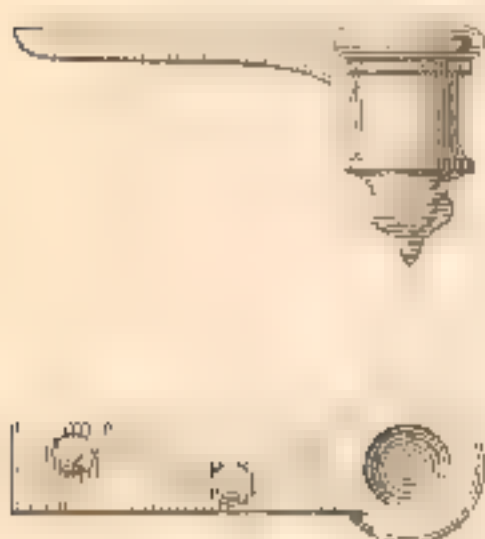
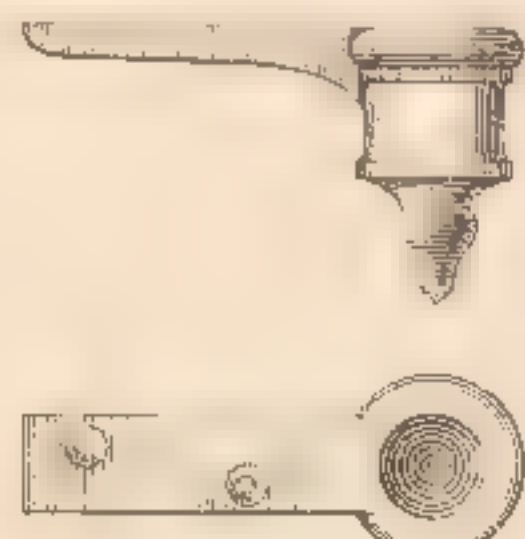
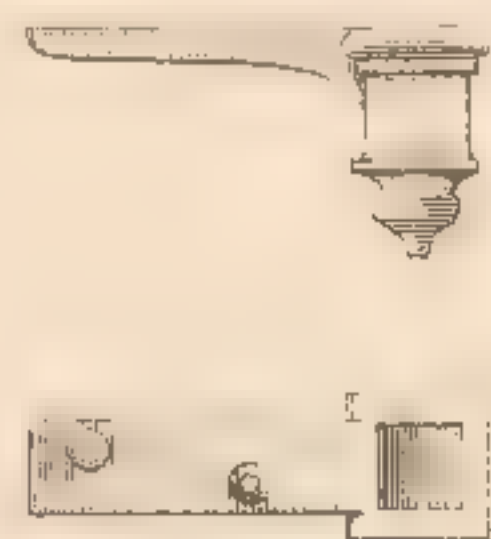
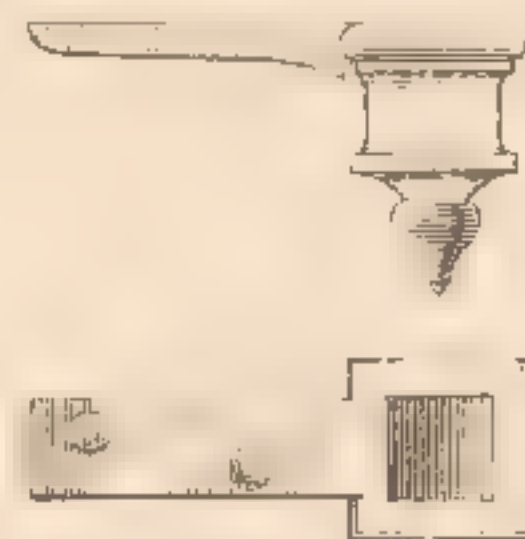
MACFARLANE'S RAILING CONNECTIONS

BALUSTER SOCKETS

FOR BATTENING INTO STONE

No 1
FOR $\frac{3}{4}$ " ROUND RODSNo 1
FOR $\frac{7}{8}$ " AND 1" ROUND RODSNo 2
FOR $\frac{3}{4}$ " SQUARE RODSNo 2
FOR $\frac{7}{8}$ " AND 1" SQUARE RODS

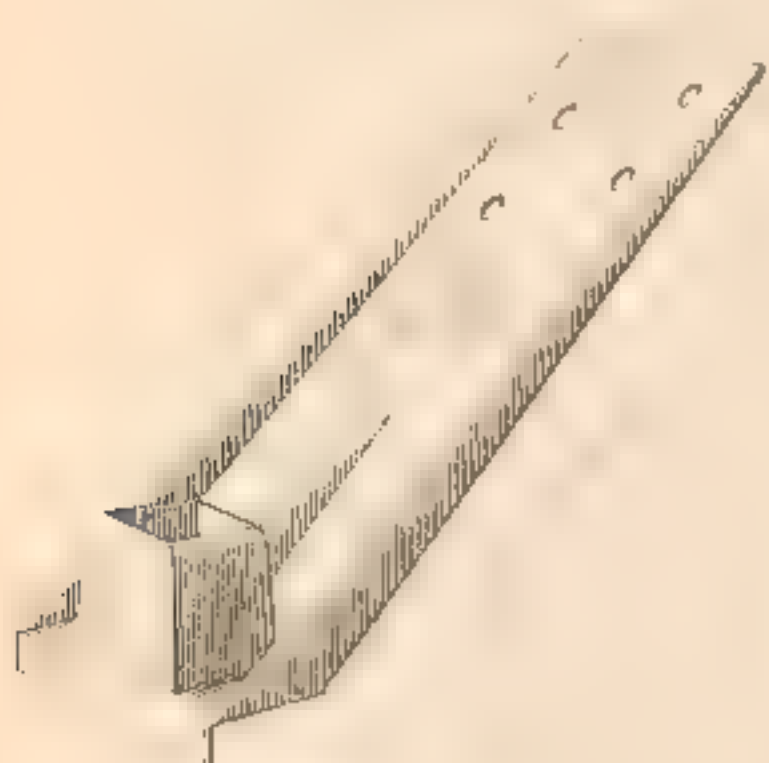
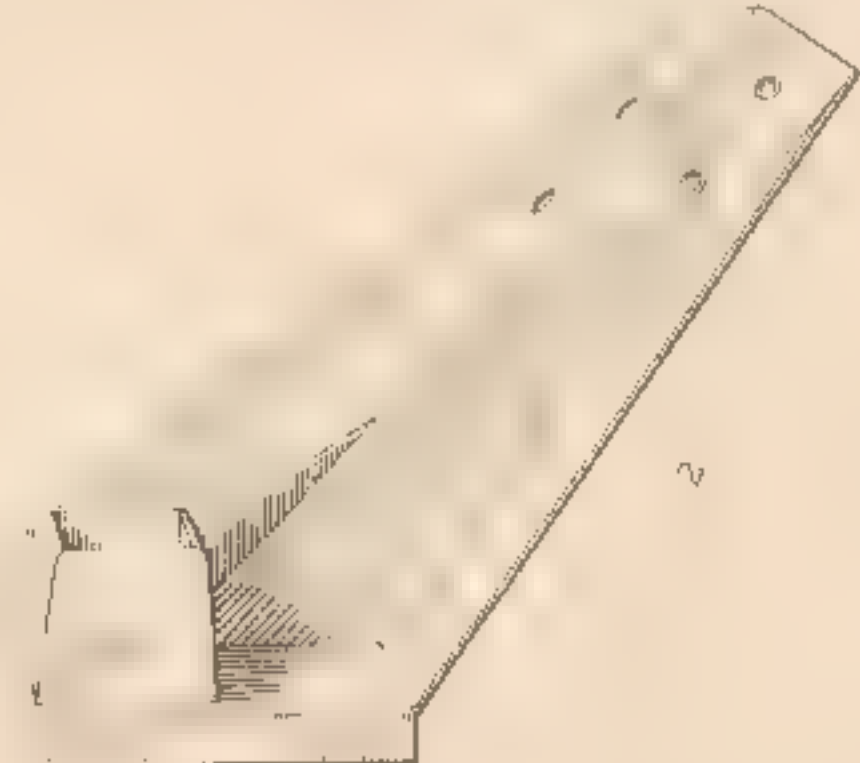
FOR SCREWING TO WOOD

No 1
FOR $\frac{3}{4}$ " ROUND RODSNo 1
FOR $\frac{7}{8}$ " AND 1" ROUND RODSNo 2
FOR $\frac{3}{4}$ " SQUARE RODSNo 2
FOR $\frac{7}{8}$ " AND 1" SQUARE RODS

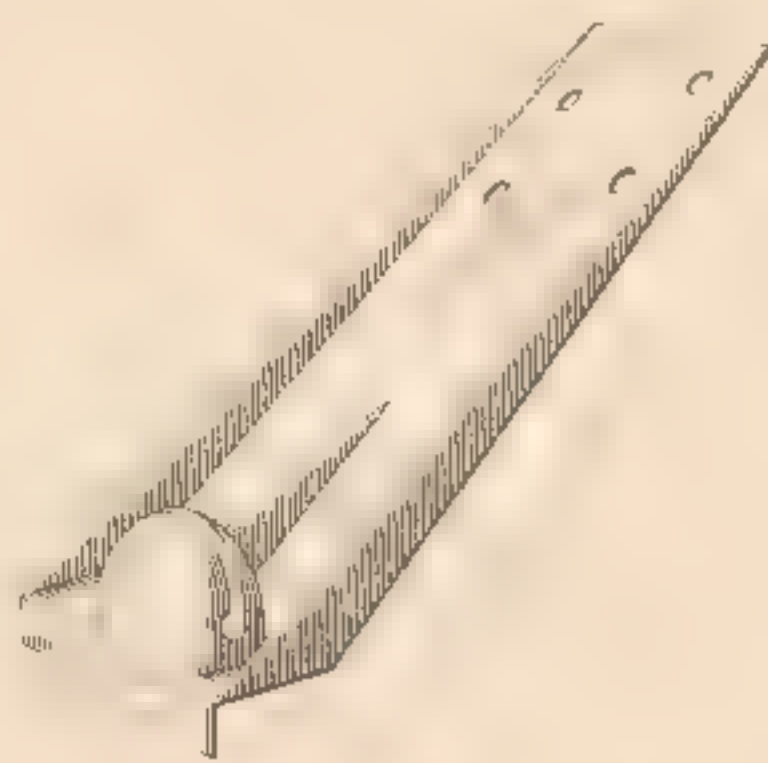
PLAT CREST SOCKET PLATE

PLAT CREST SOCKET PLATE
FOR CORNERPLAT
DOVETAILRIDGEROLL
DOVETAILDOVETAIL
BATTFor $1\frac{1}{4}$ ", $1\frac{1}{2}$ ", and 2 inch Standards.

EAVE CREST SOCKET PLATE

EAVE CREST SOCKET PLATE
FOR CORNER

EAVE CREST DOVETAIL PLATE

For $1\frac{1}{4}$ ", $1\frac{1}{2}$ ", and 2 inch Standards.

We can supply our Eave Crest Plates to fit the pitches of roof shown by diagram page 124. *Intermediate or other pitches made to order.*
The application of Eave Cresting to buildings is shown on pages 122 $\frac{1}{4}$ ", 122 $\frac{1}{2}$ ", and 226.

SCALE 3 INCHES = 1 FOOT

Nº 5

Nº 5

Nº 5



2 x



2 1/2 x



3 x



4 x

Nº 6

Nº 6

Nº 6

Nº 6



2 x 1"



2 1/2 x 1 1/4"



3 x



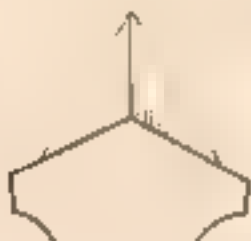
4 x

Nº 2

Nº 7



2 3/8 x 1/2"



3/8 x 1 1/2"



3 x 7/8"

Nº 2

Nº 8

Nº 2



4 x 3 1/2"

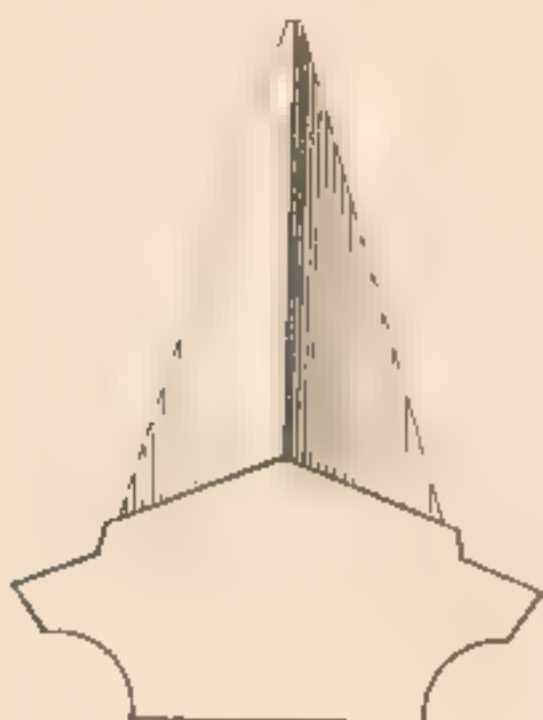


3 1/4 x 3 1/8"

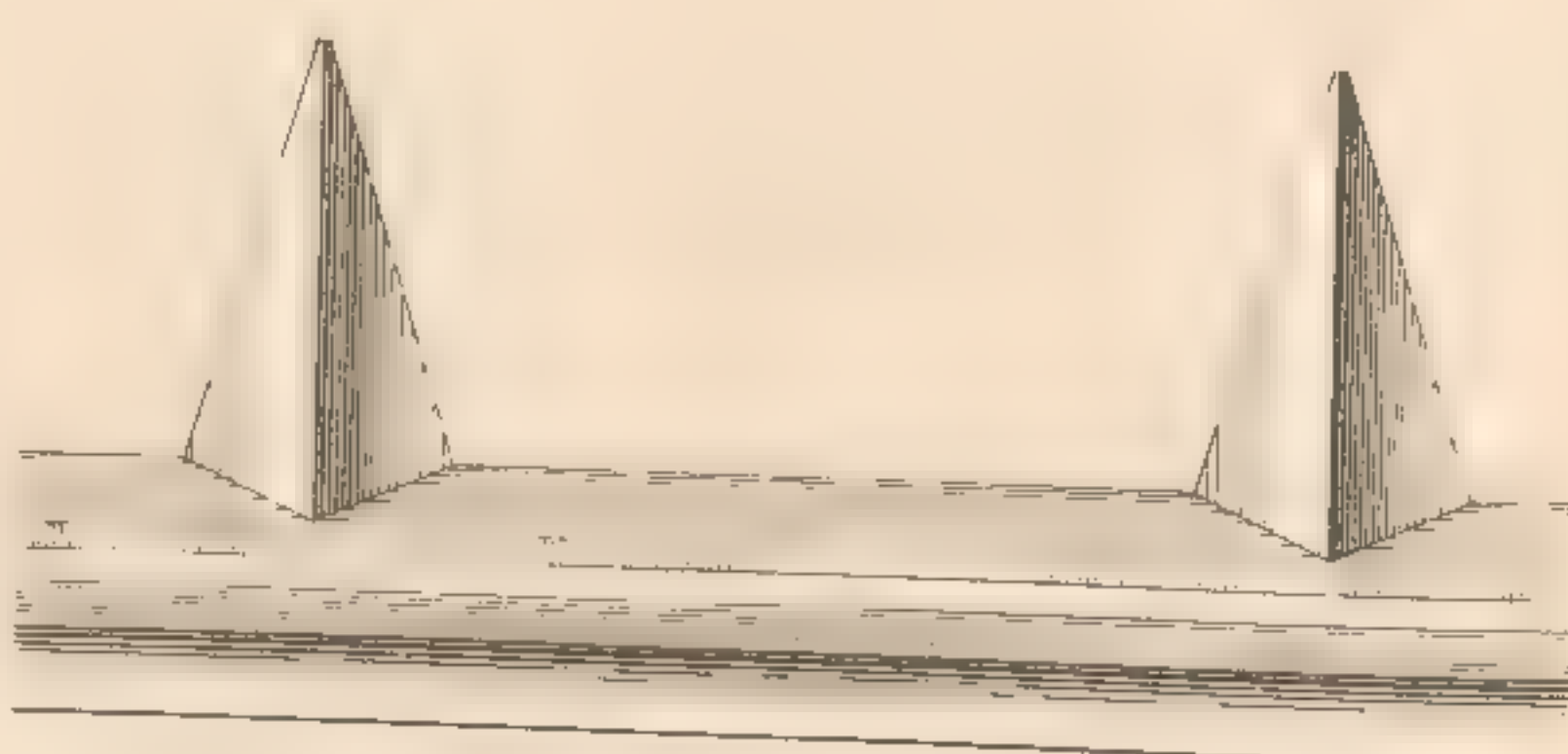


4 1/2 x 3 1/8"

Nº 7

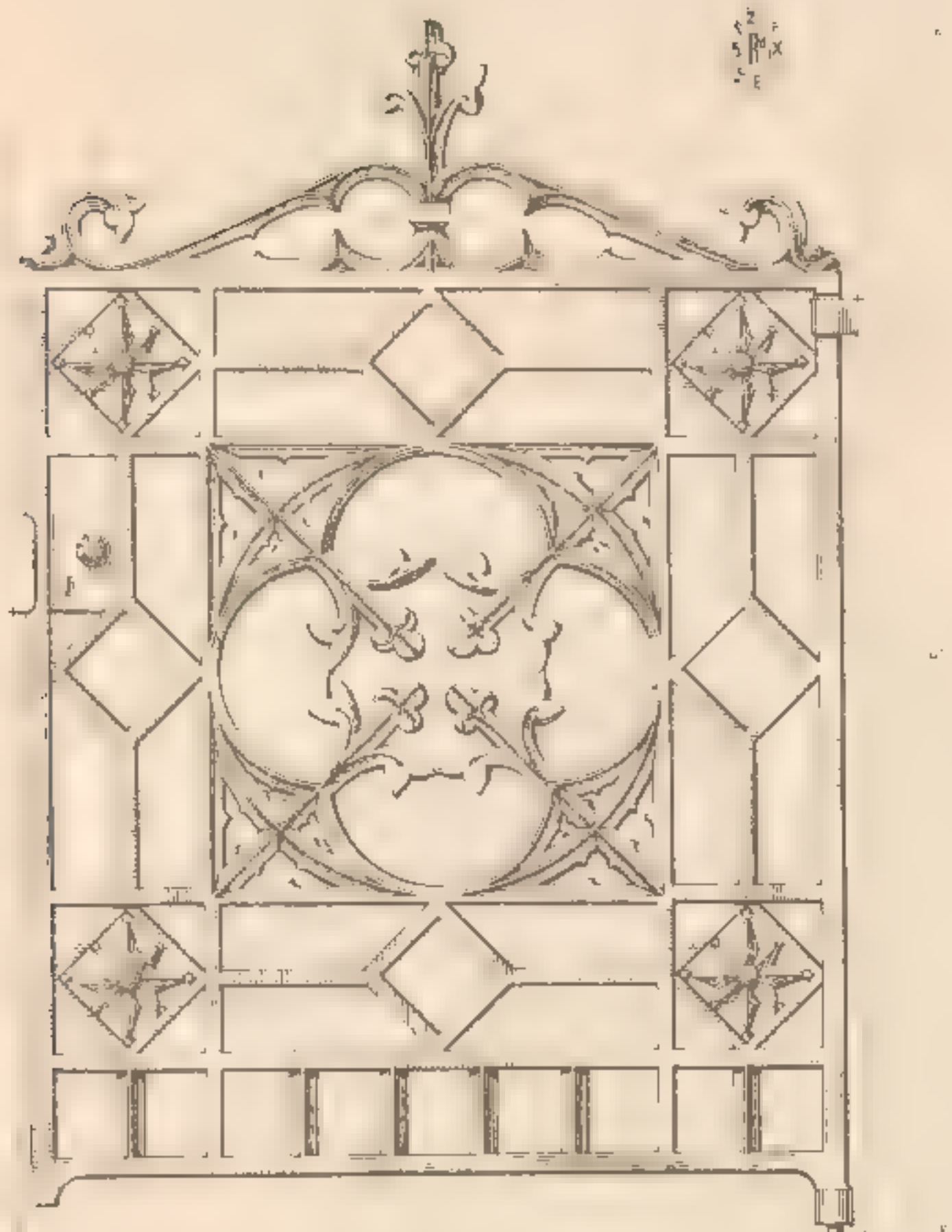


3 x 4"

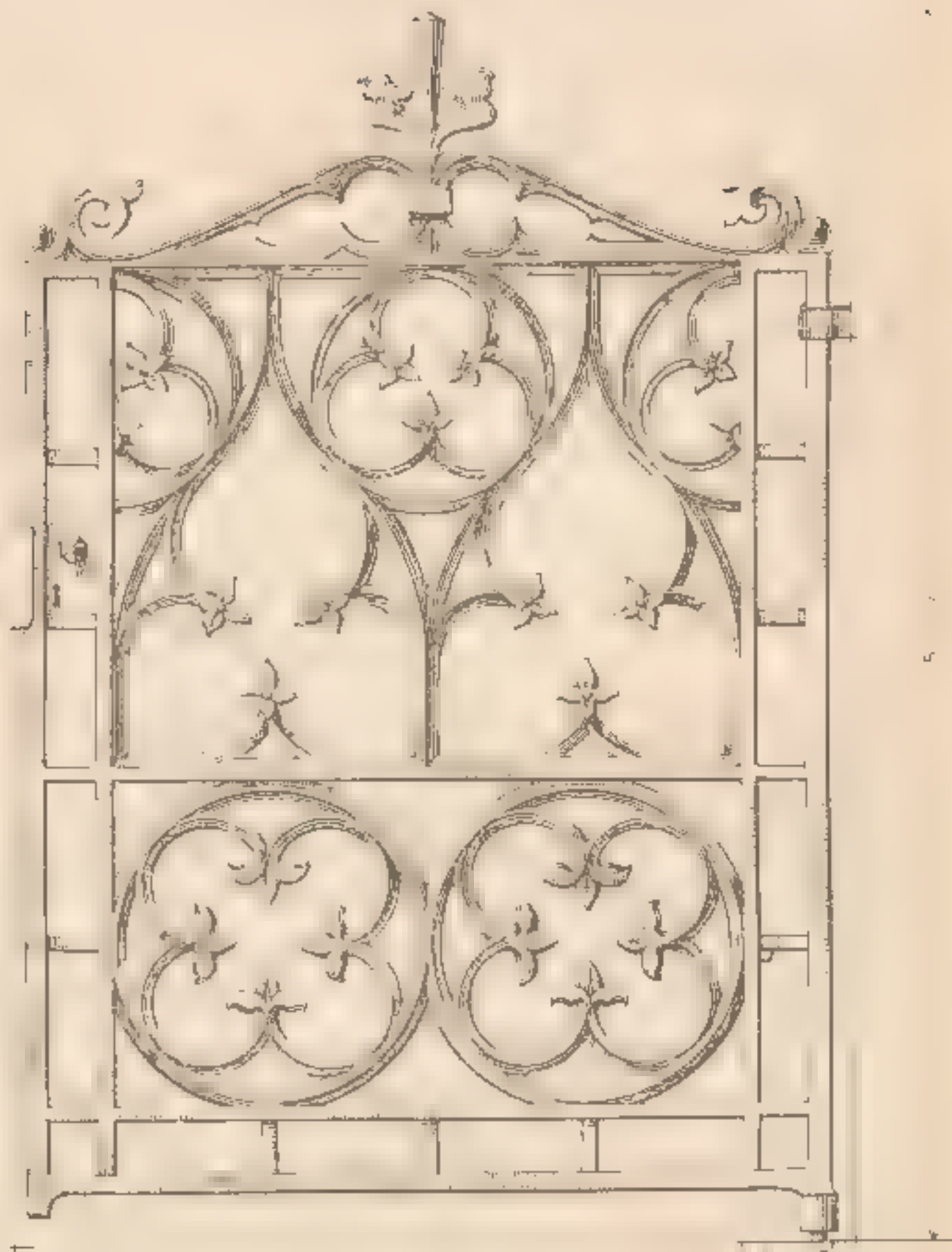


SCALE 6 INCHES = 1 FOOT

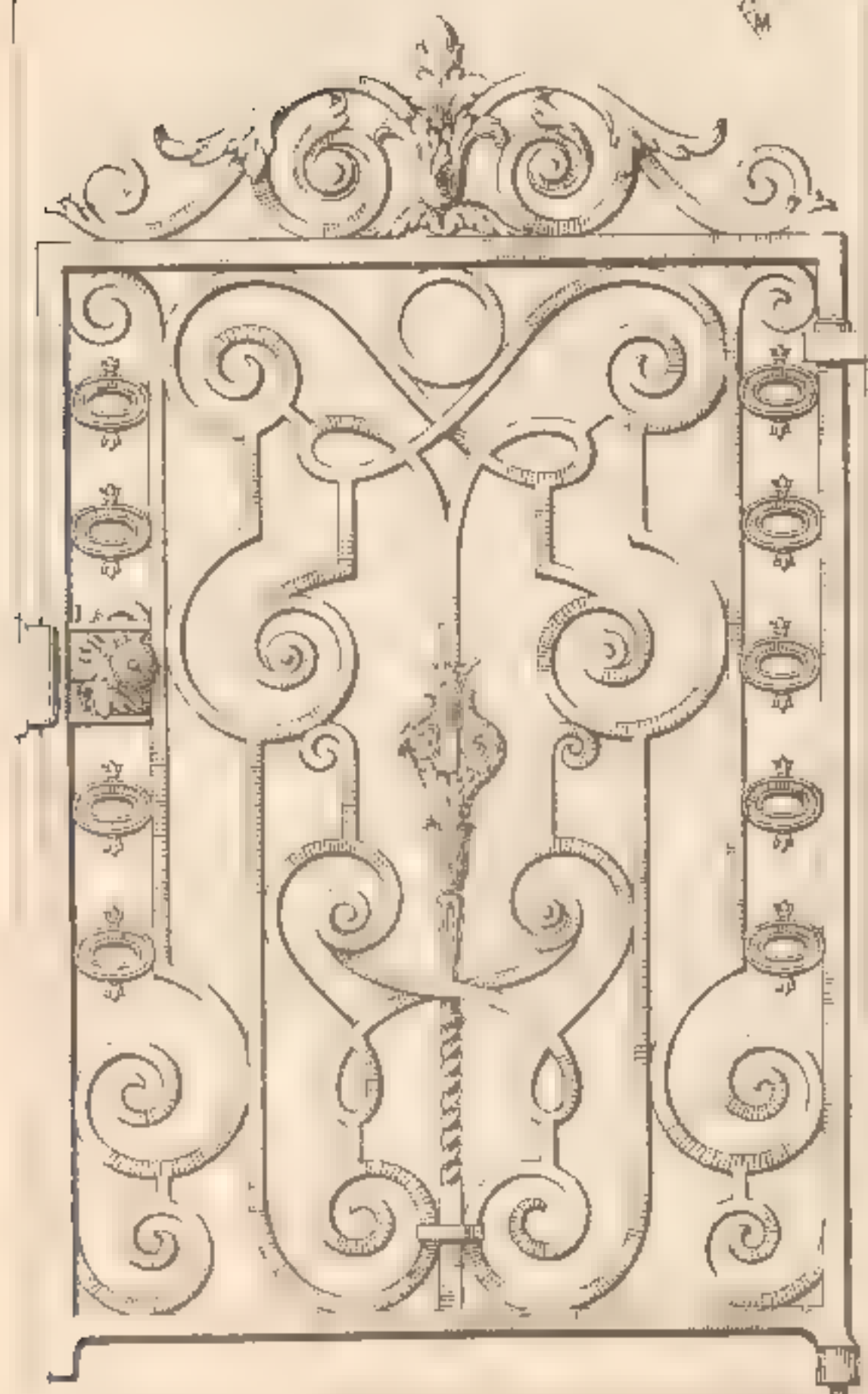
Nº 23



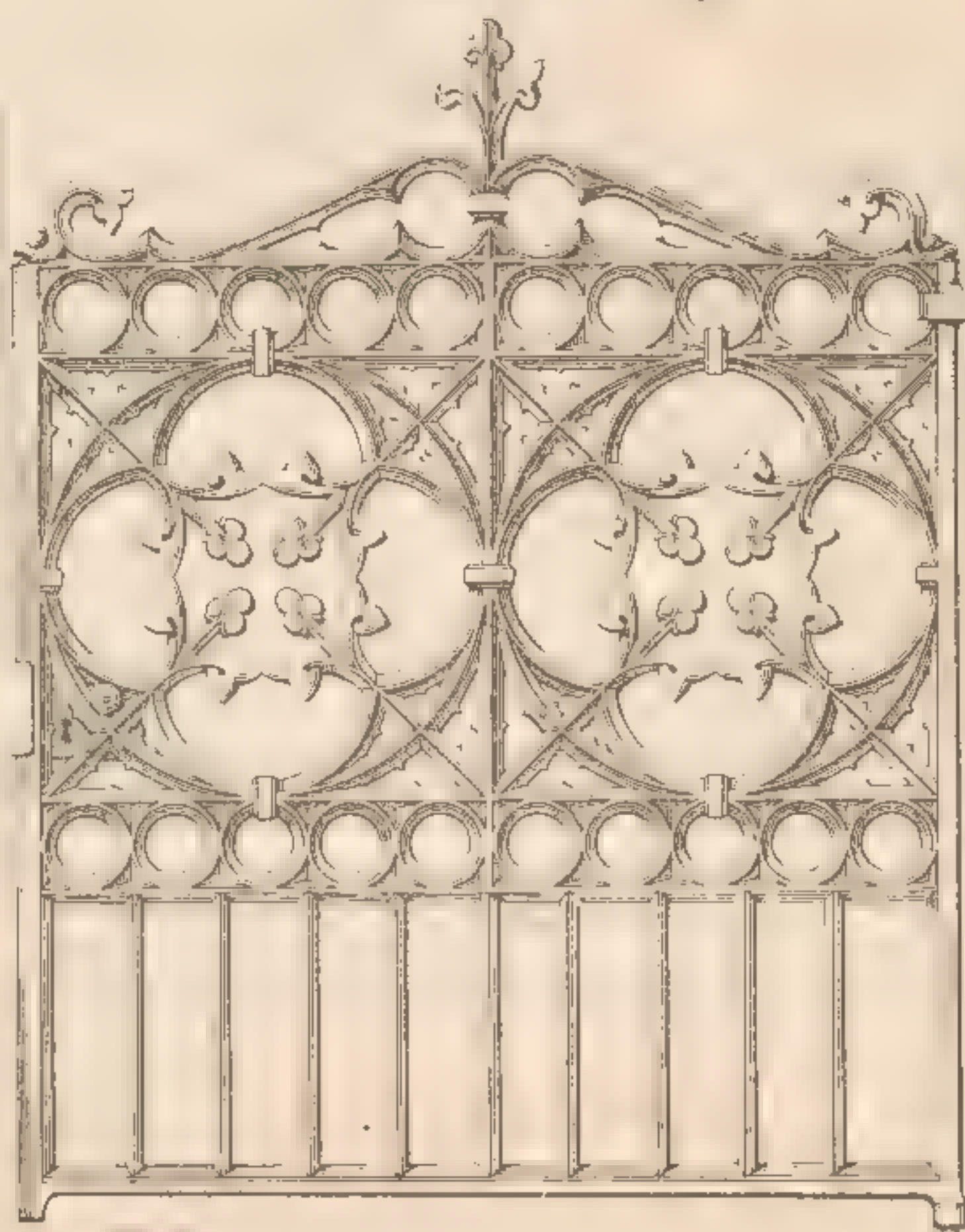
Nº 8



Nº 46



Nº 3





JAMES GATES

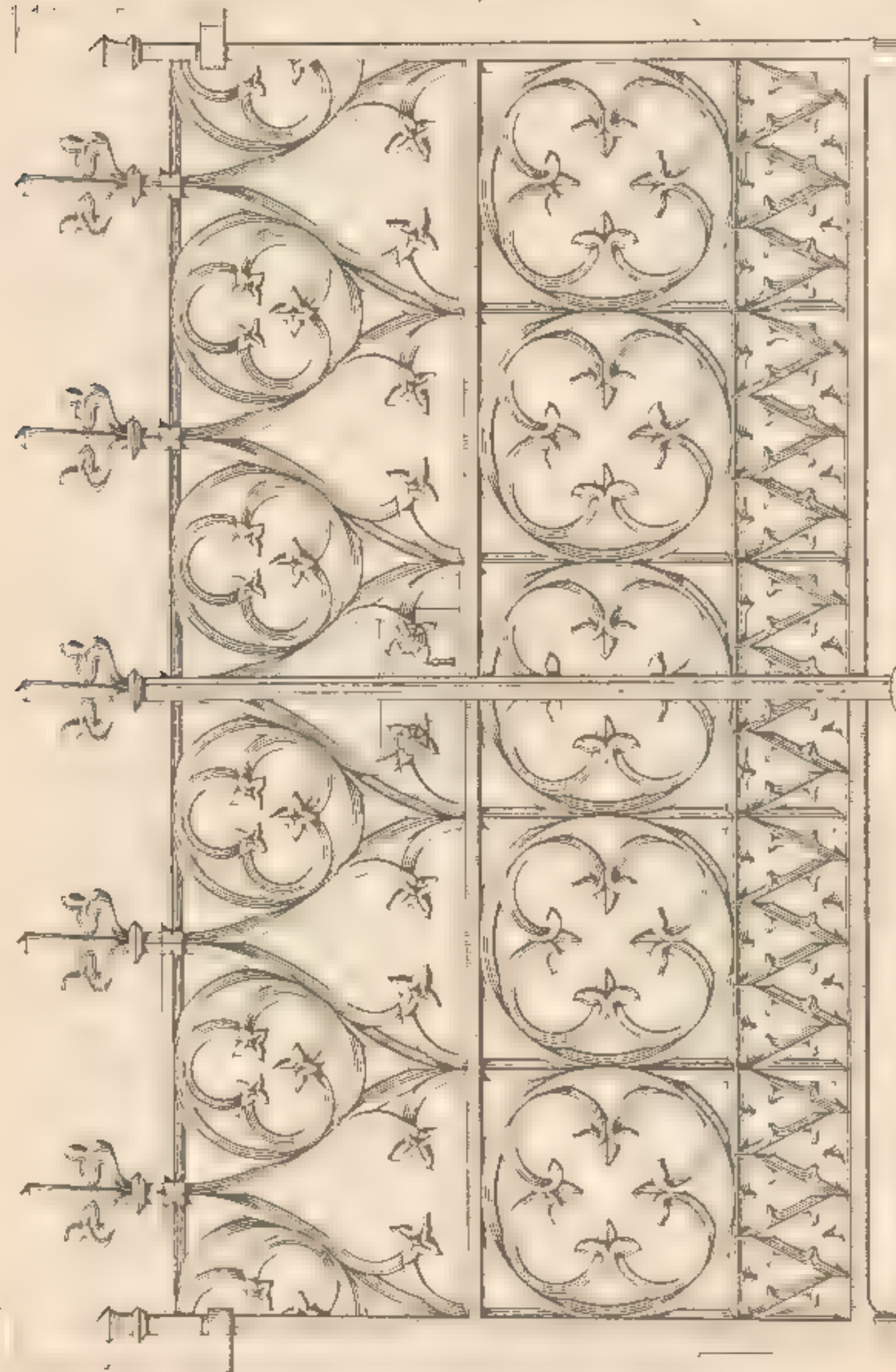
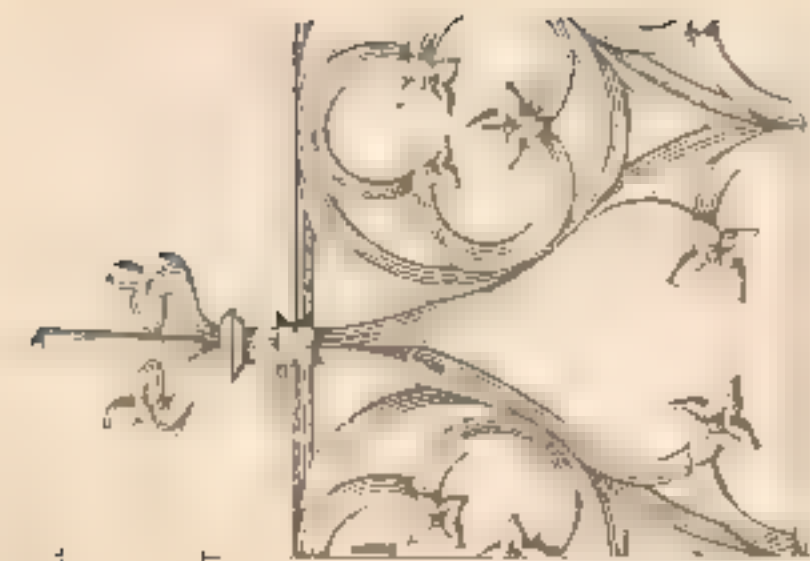
N^o 83

0 0'

INCH = 1 FOOT

MANUFACTURE GATES

Nº 80

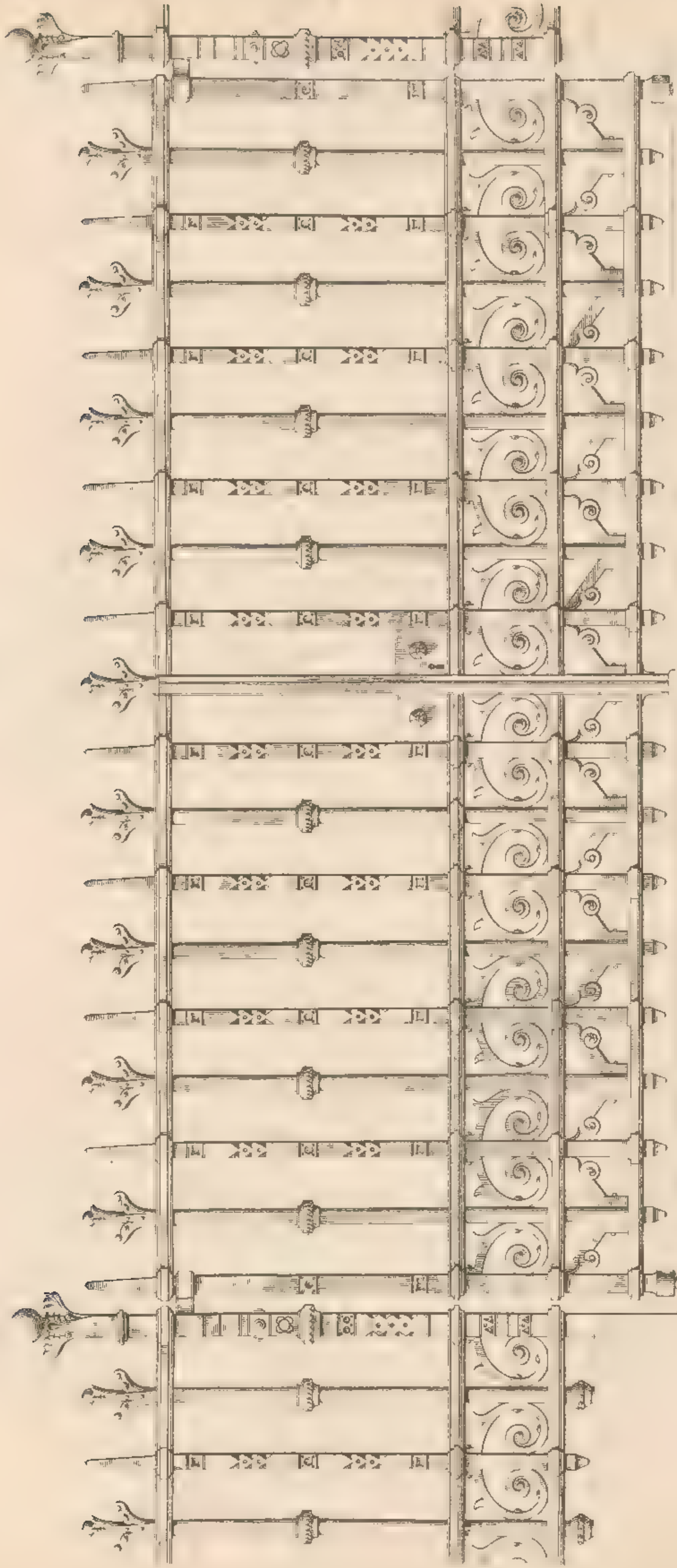


MANUFACTURE GATES

MACFARLANE'S GATES

802 64

212



ॐ

SAE = 1 FOOT



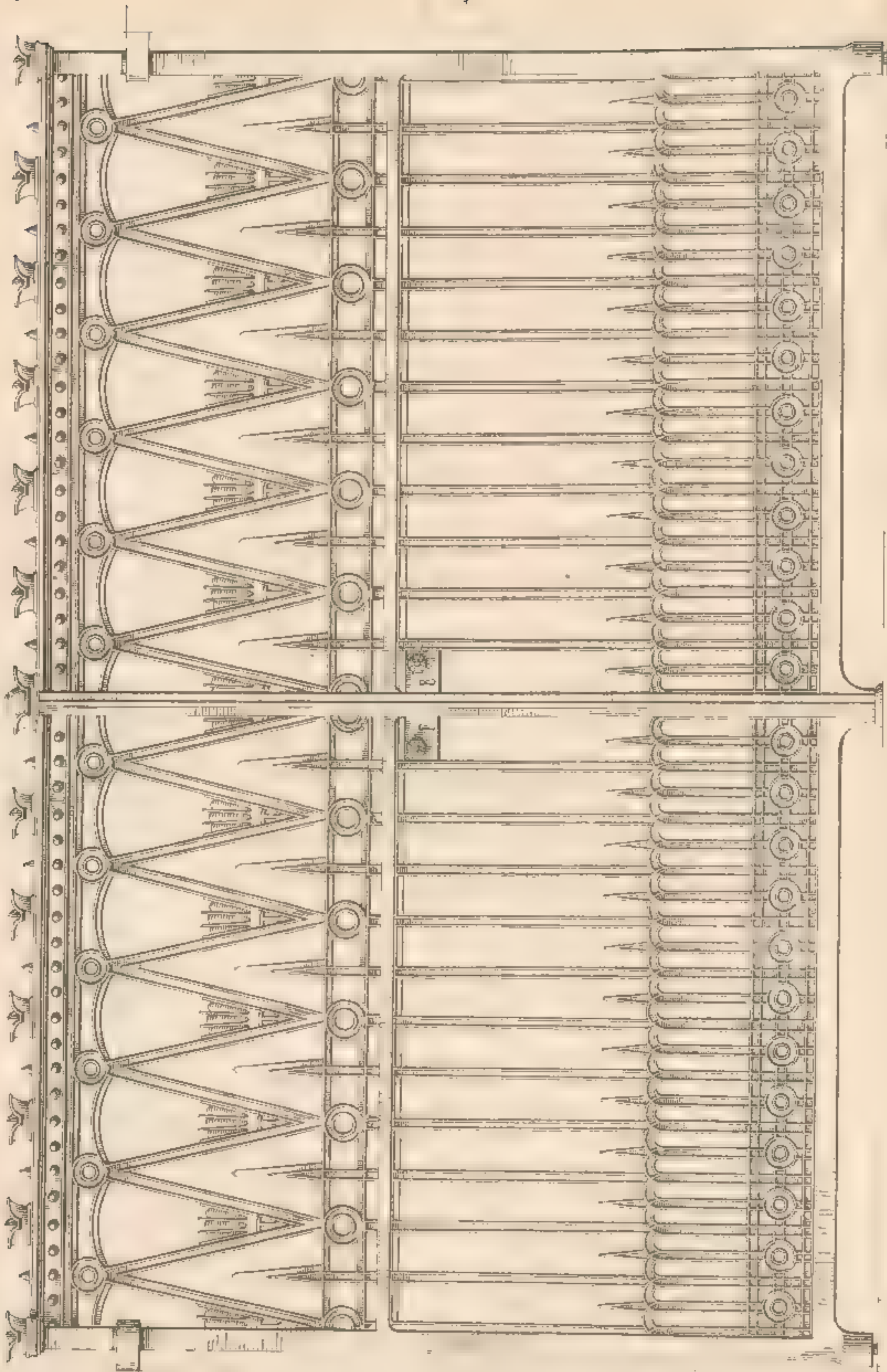
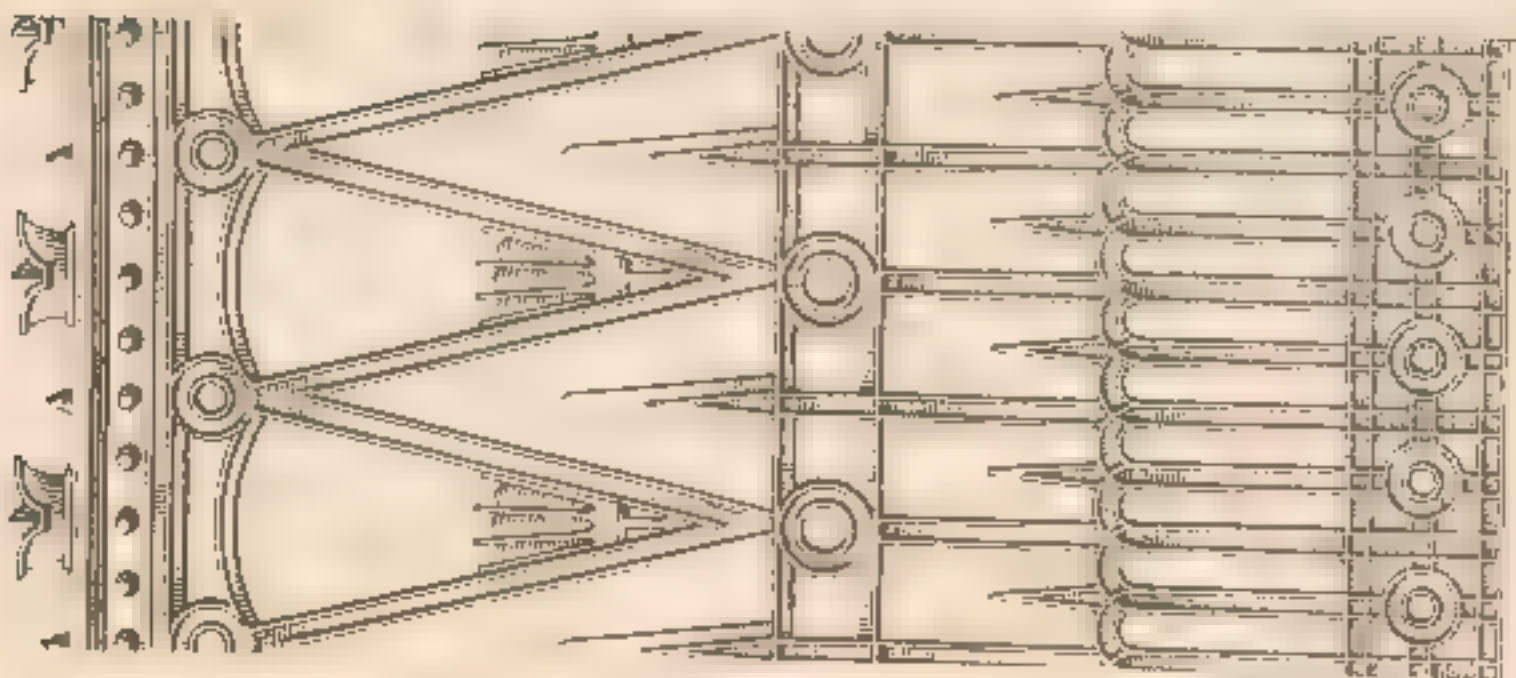
ANE'S GATES

AS 27



MACFARLANE'S GATES

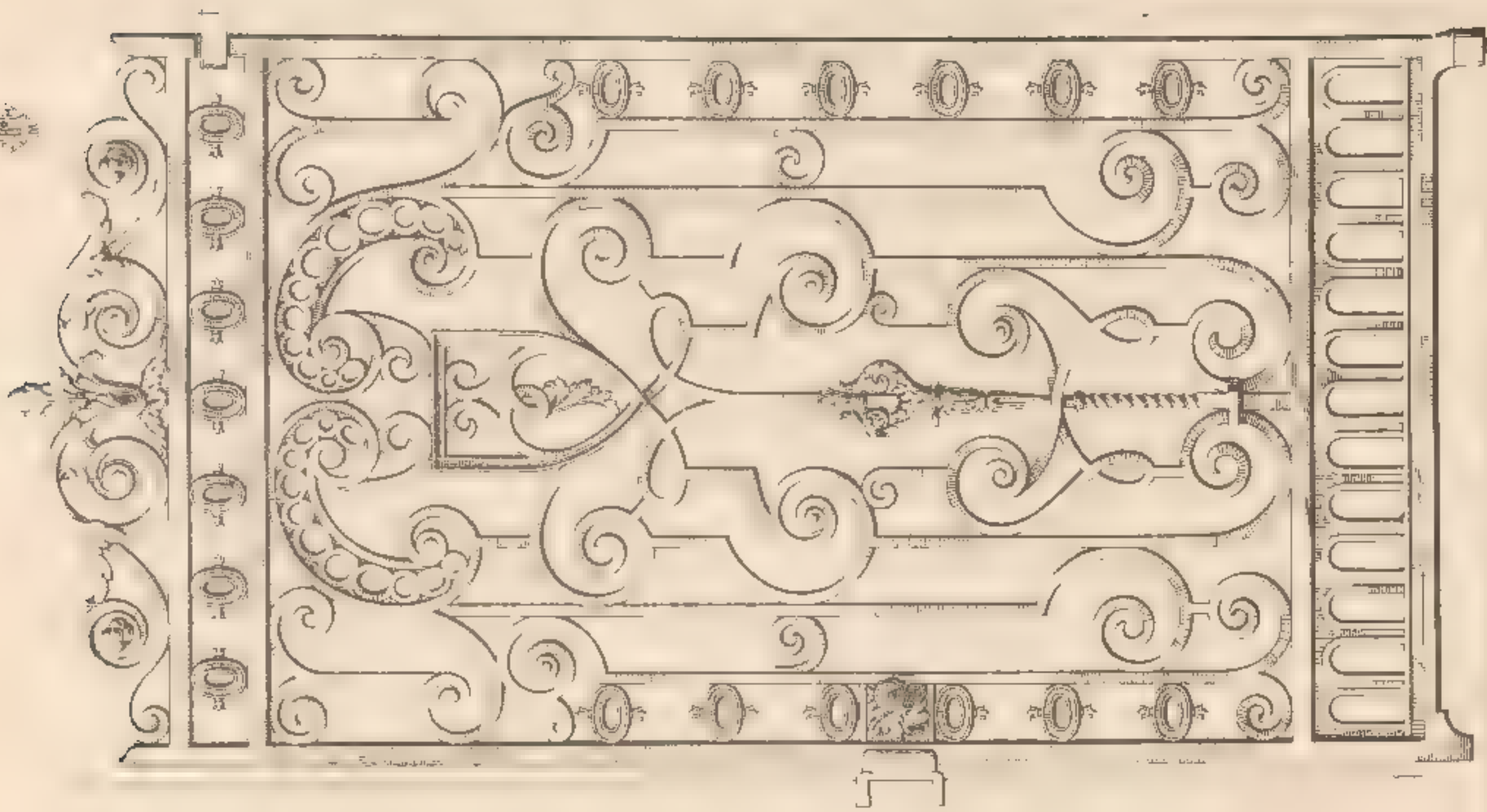
Nº 126.



9

J A C V H - J T

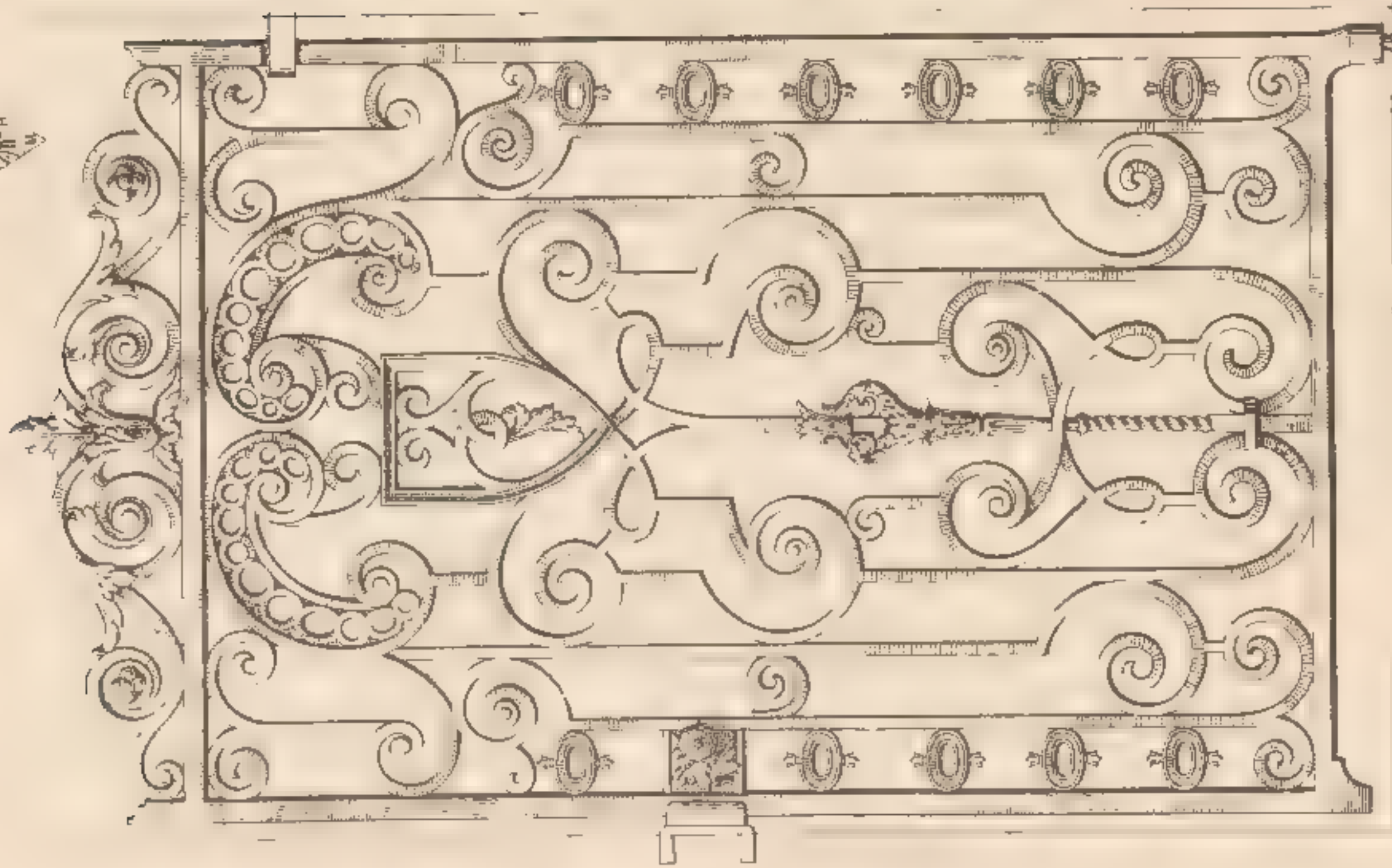
Nº 46



4 0

SCALE 1 INCH = 1 FOOT

Nº 46



4 0

MACFARLANE'S GATES



No 461



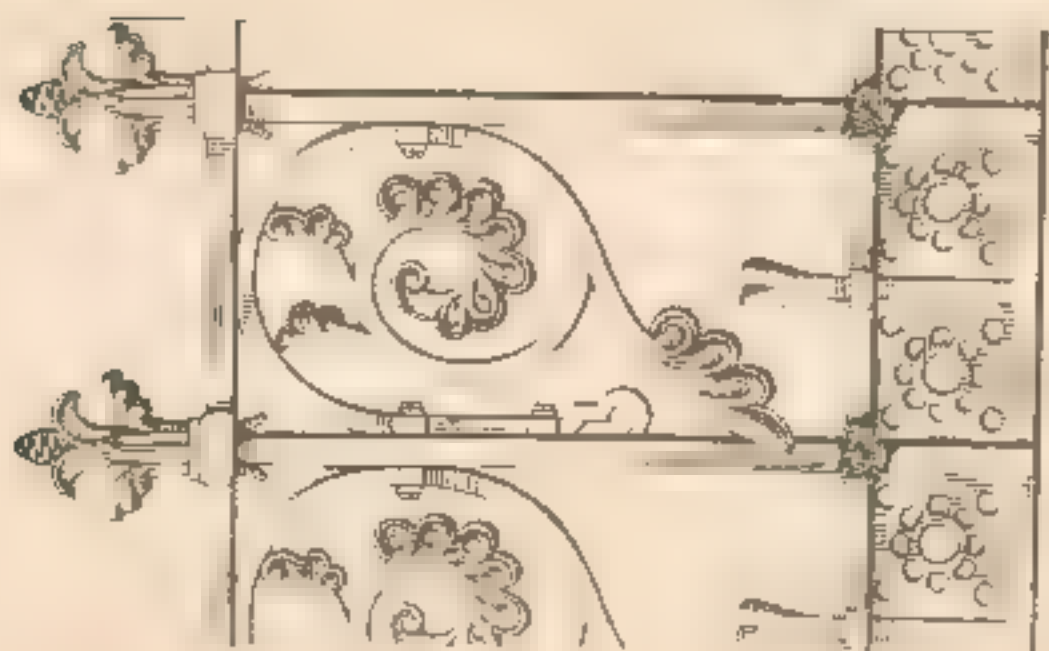
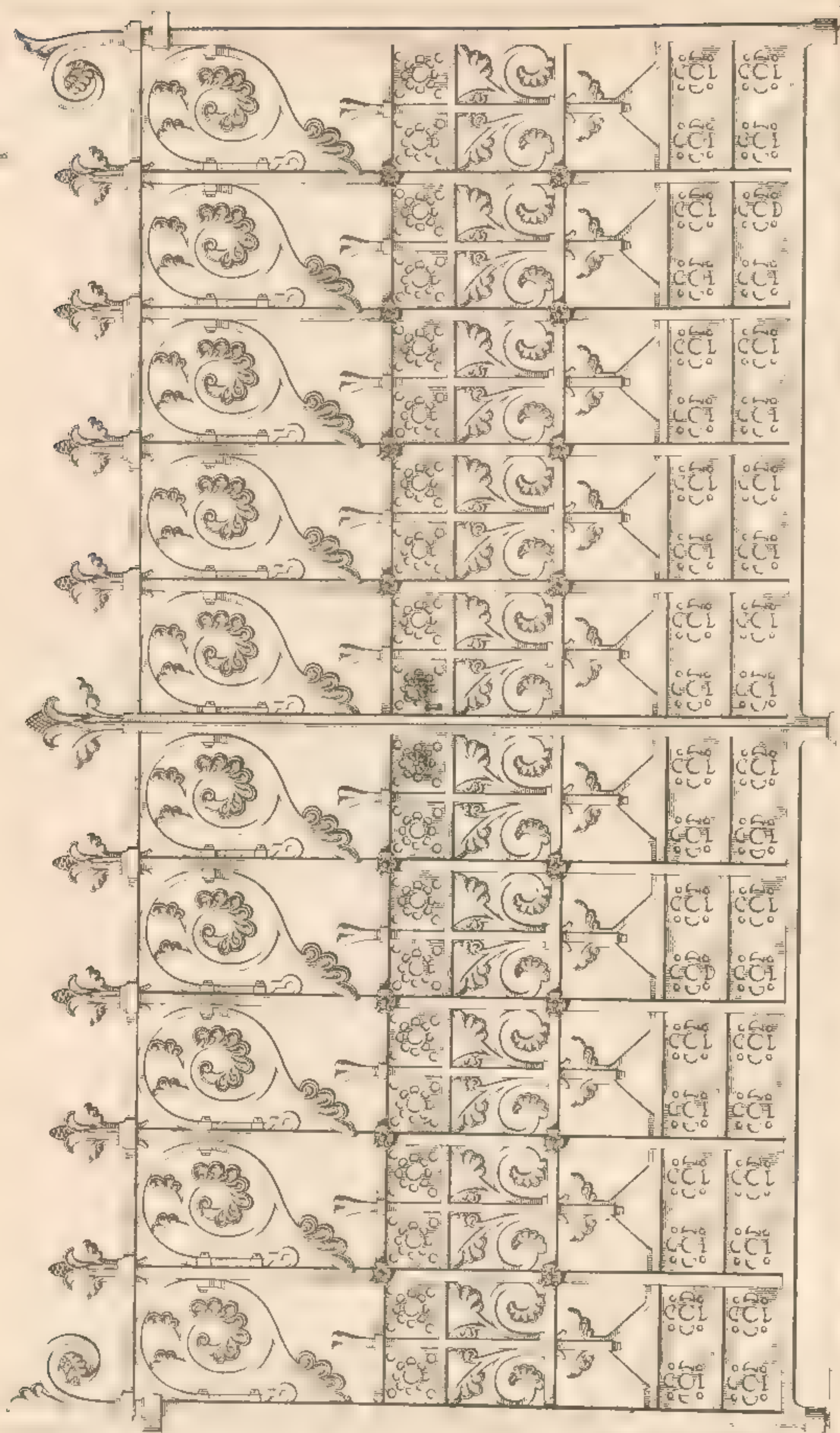


F. 1001

S. 14

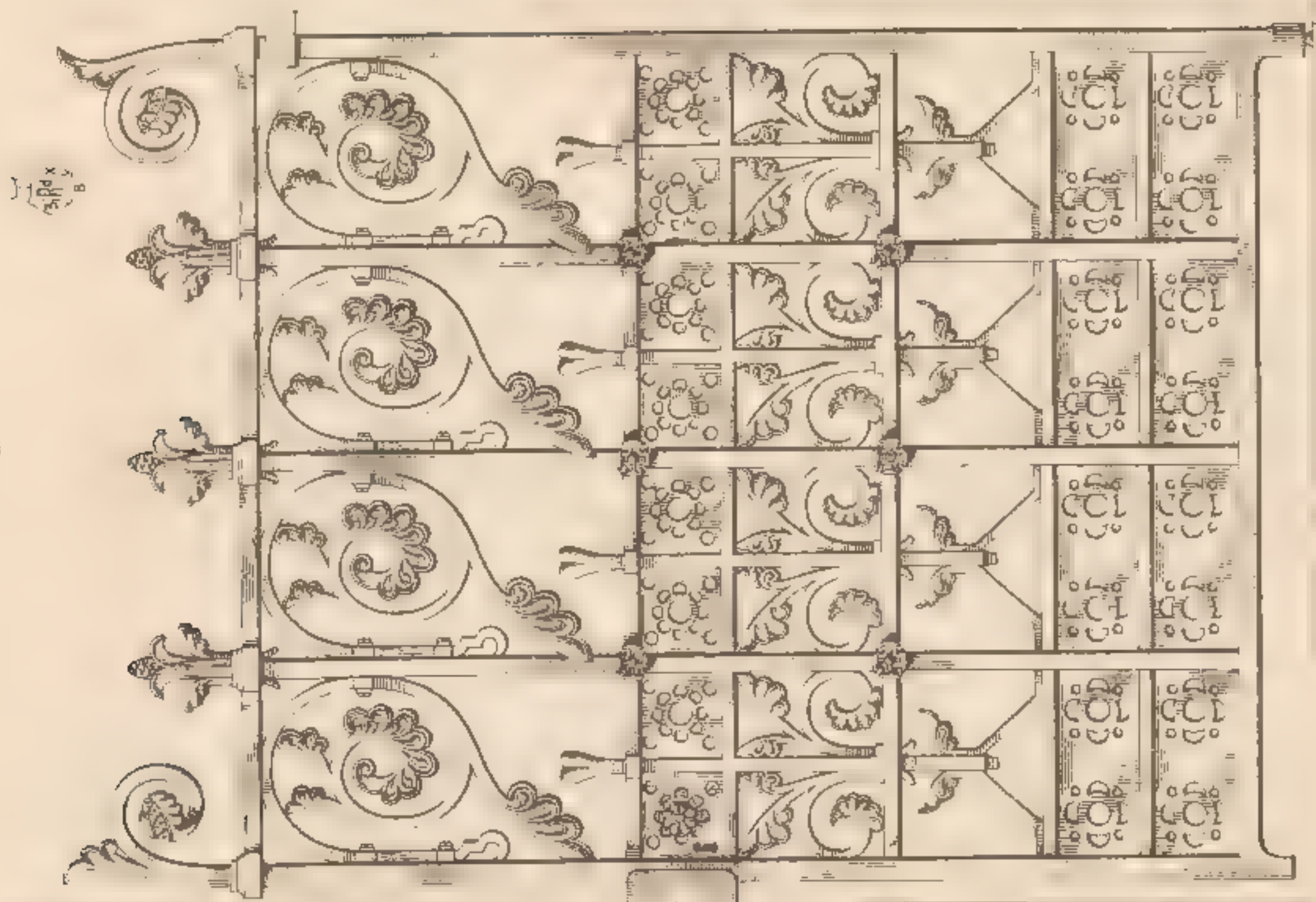
MACFARLANE'S GATES

Nº 2



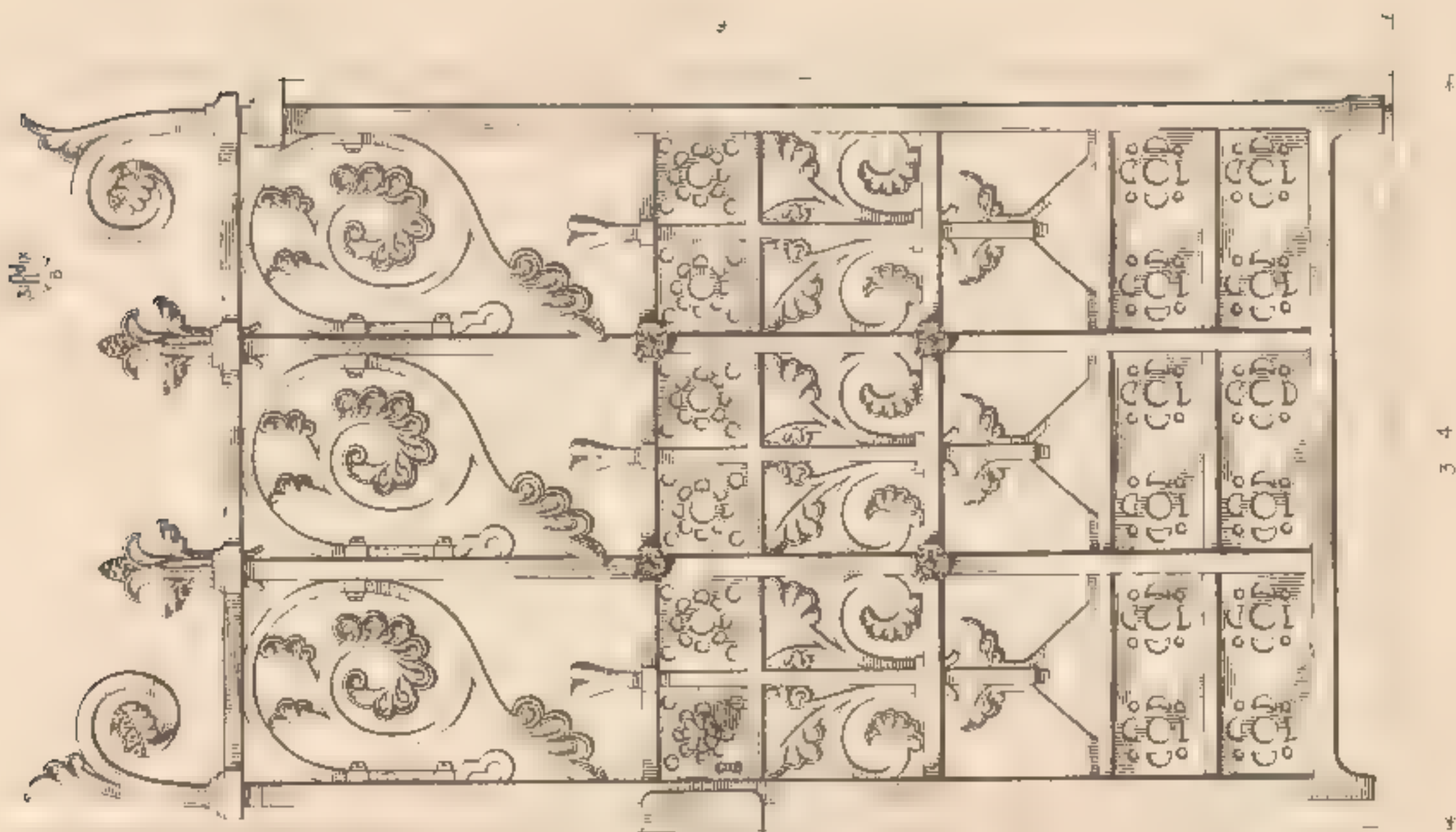
MACFARLANE'S GATES

N^o 2



4 4

N^o 2

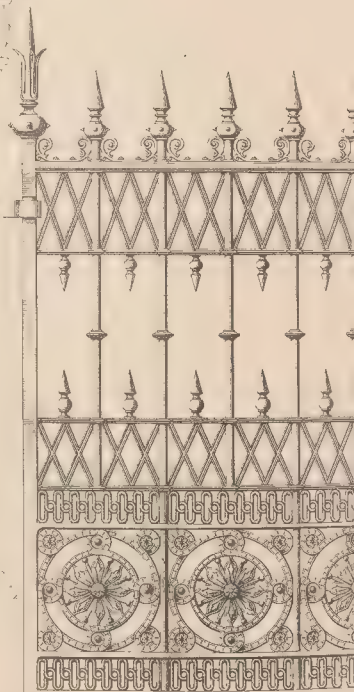
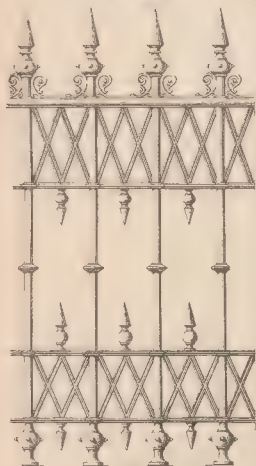


3 4

SCALE 1 INCH = 10

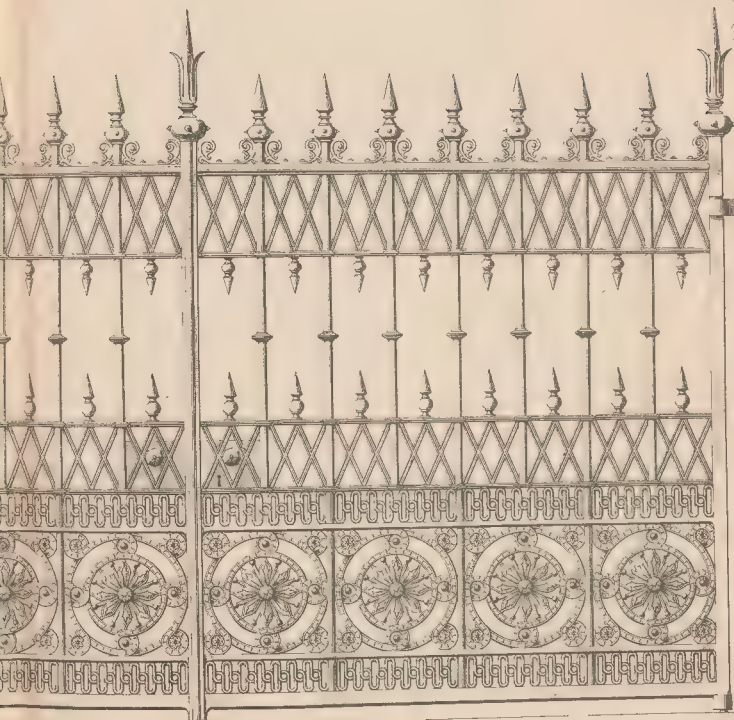


MACFAR



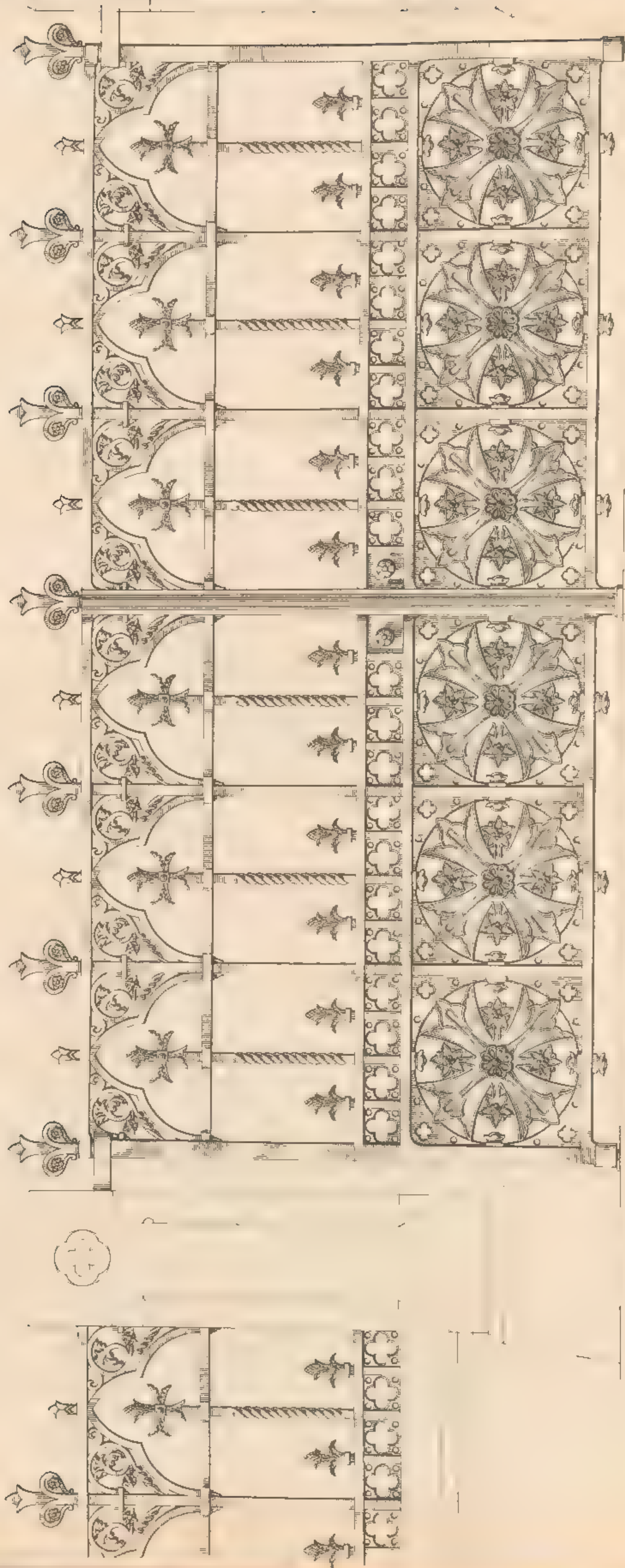
PLANE'S GATES.

K. 454



MACFARLANE'S GATES

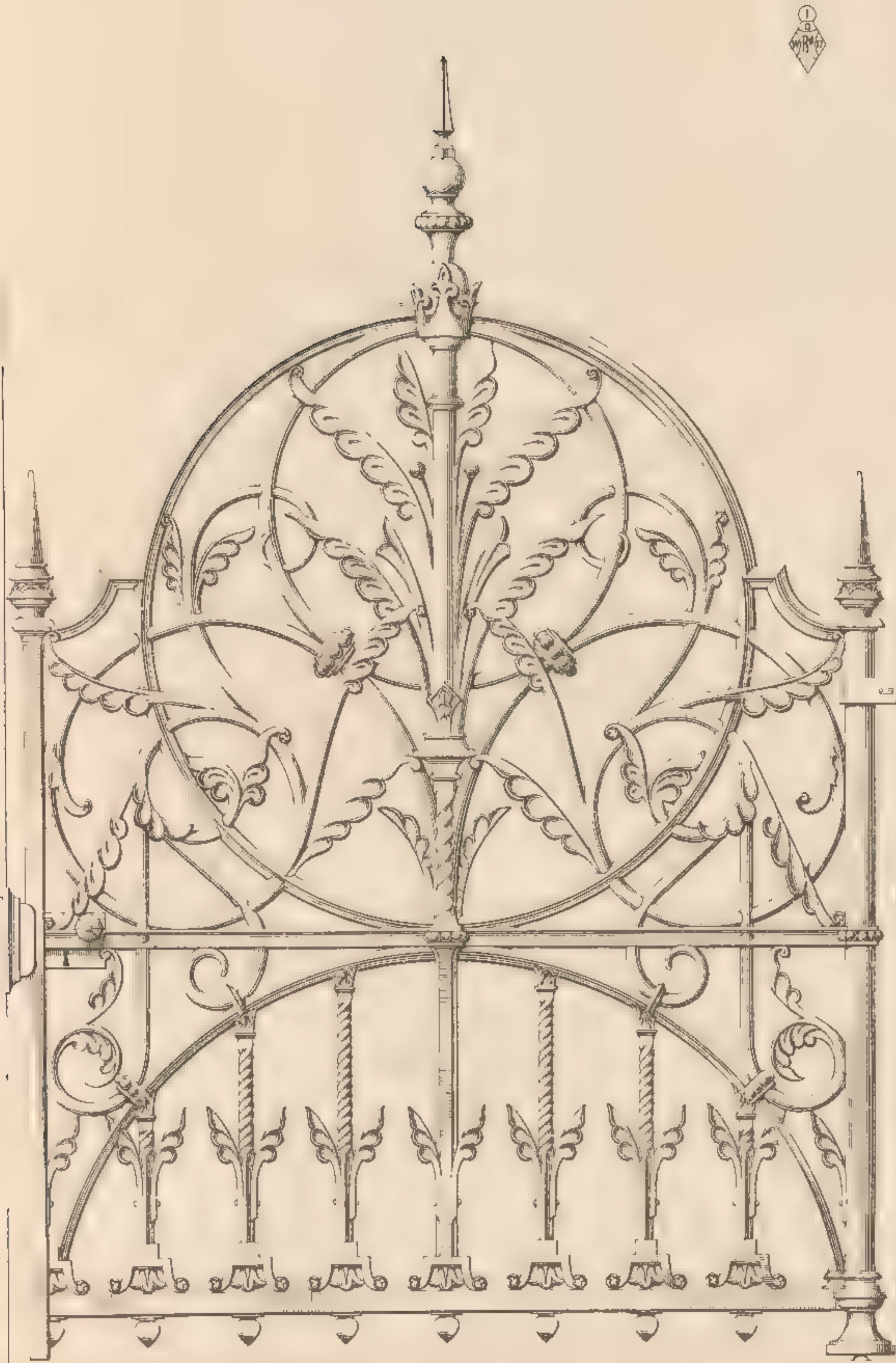
Nº 457



SCALE 1 INCH = 1 FOOT

MACFARLANE'S GATES.

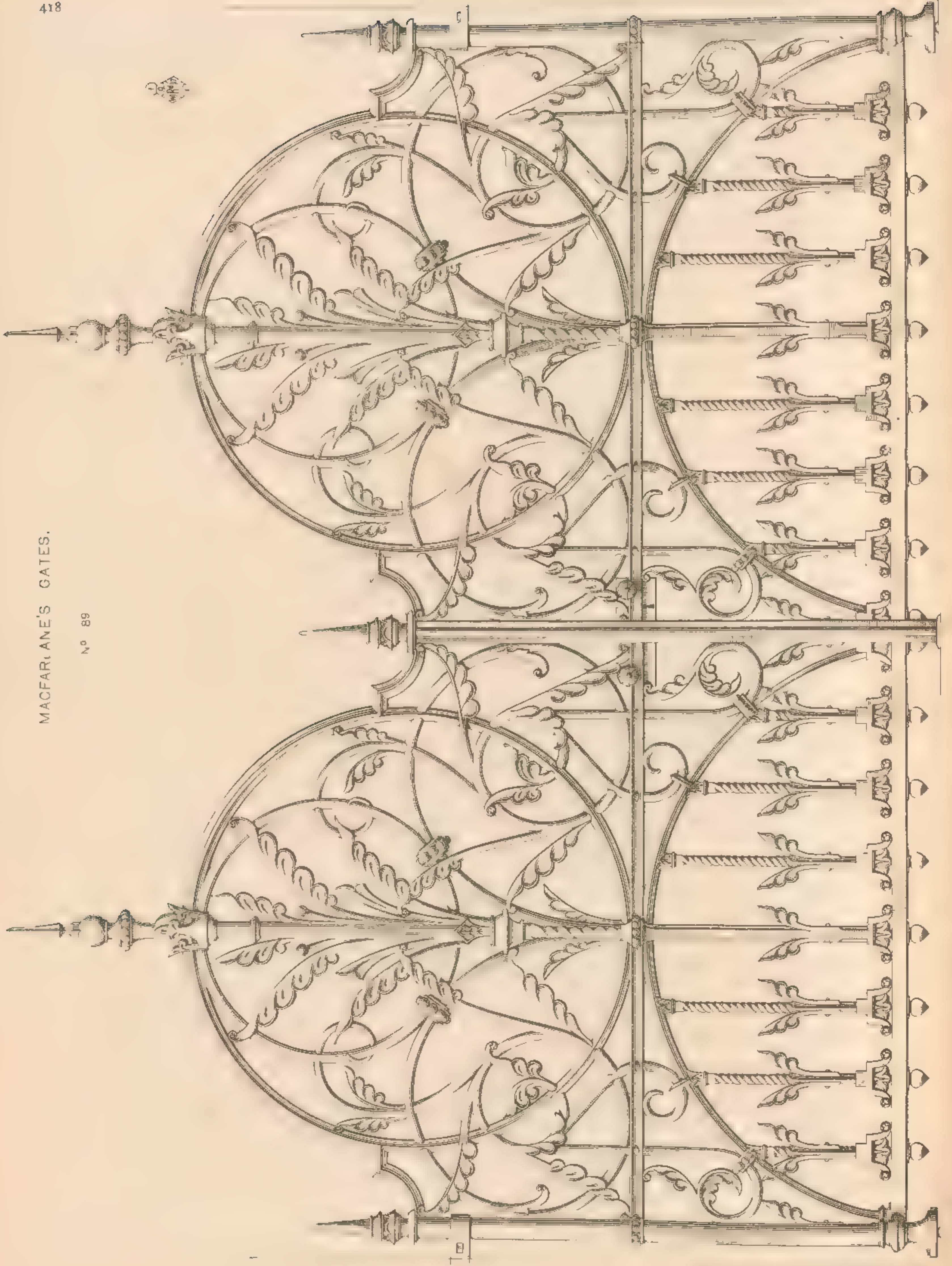
No 189

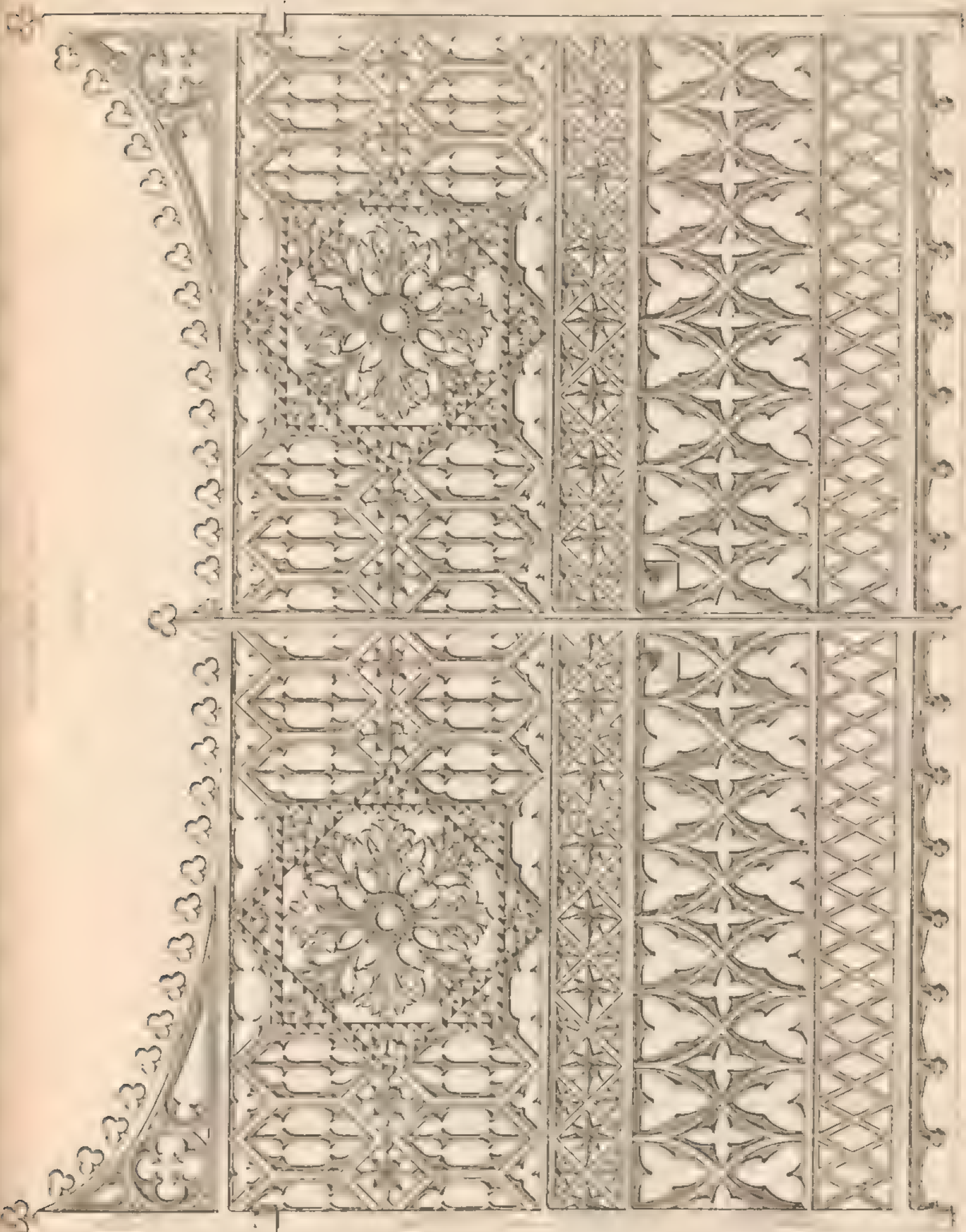


ALF NCH FCTT

MACFARLANE'S GATES.

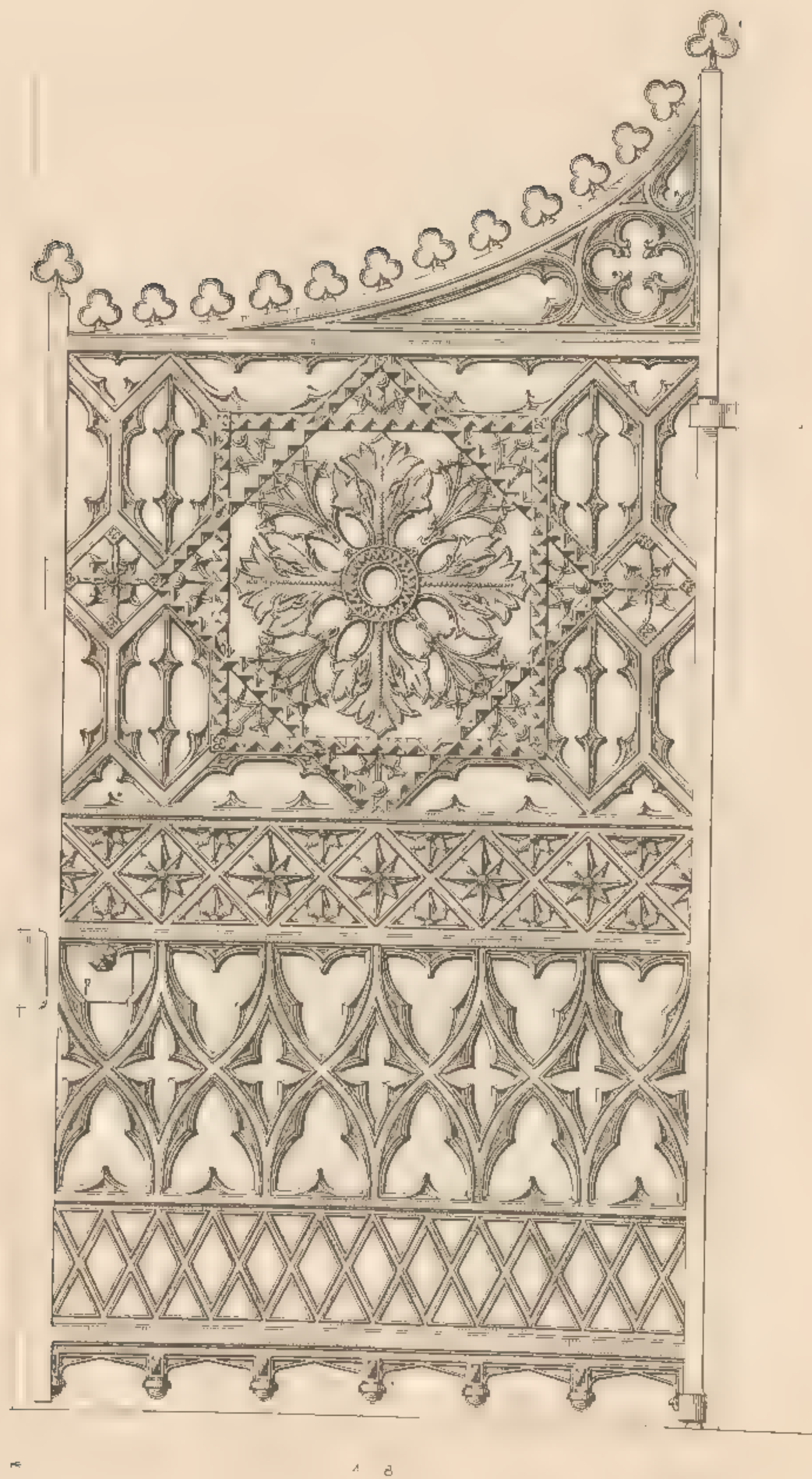
No 89





MA FARLANE'S GATES

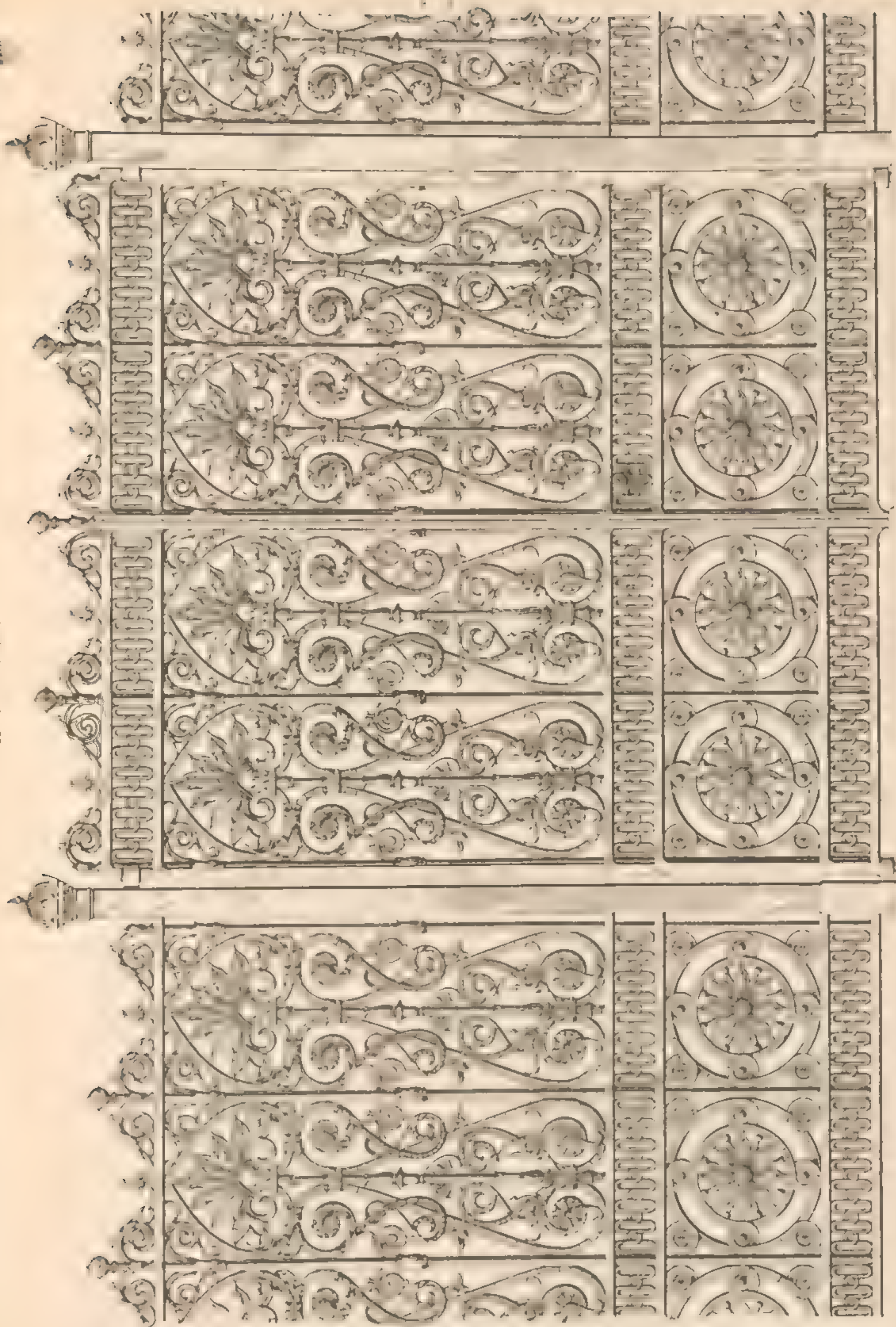
No 85



SCALE IN H FEET

MACFARLANE'S GATES

NO 63 WITH SCREEN RAIL



MACFARLANE'S HINGES

N^o 12

2 2

N^o

2 2

N^o

4 2

N^o 7

9

N^o 2

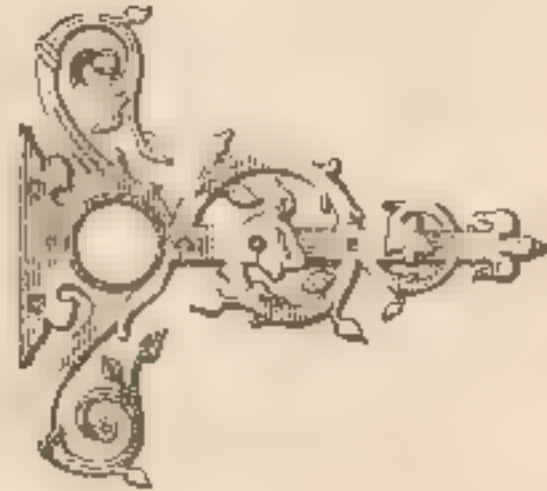
1 8"

N^o 5

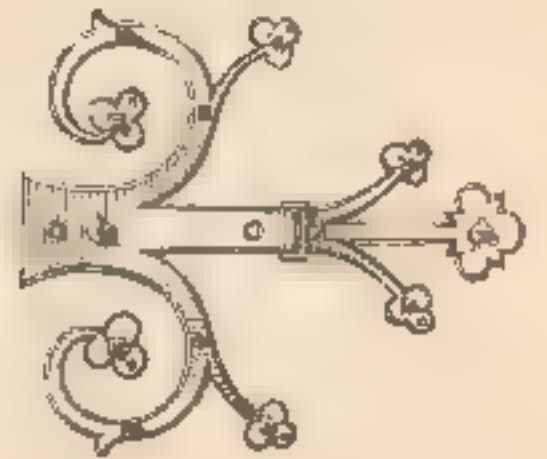
1 6

N^o

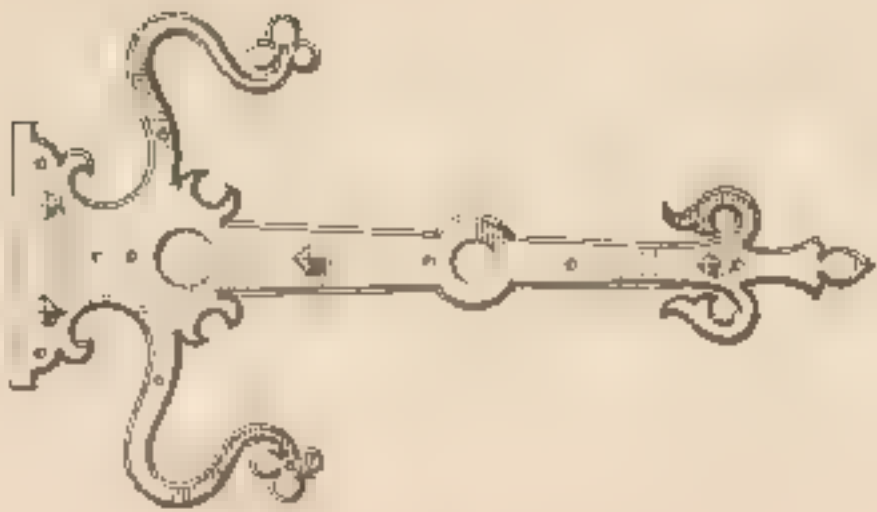
8 2

N^o 6

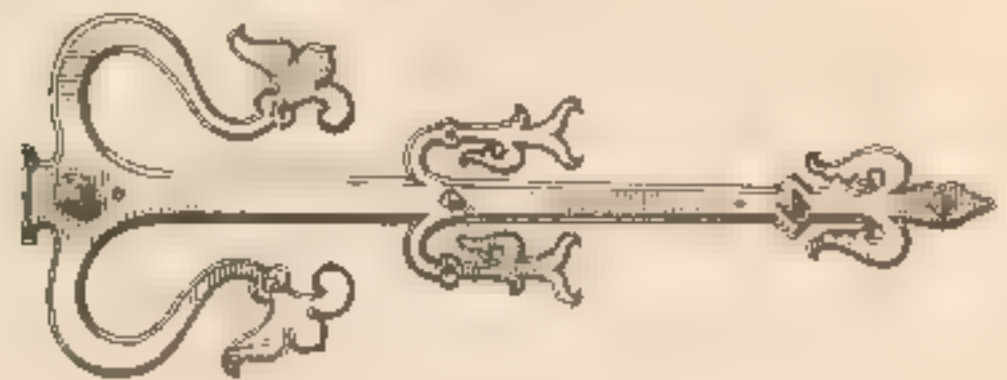
5 2

N^o 8

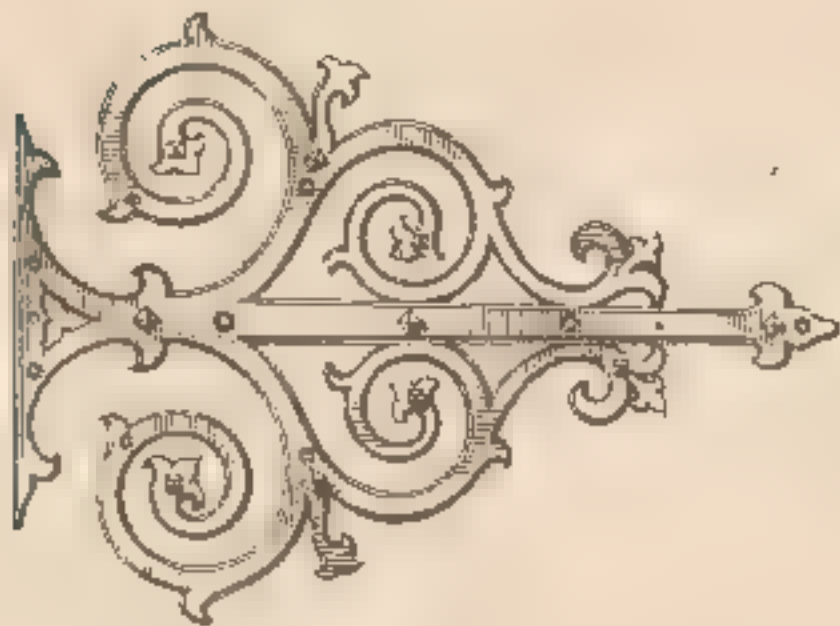
5

N^o 5

2 5 4

N^o 7

2 8 2

N^o 3

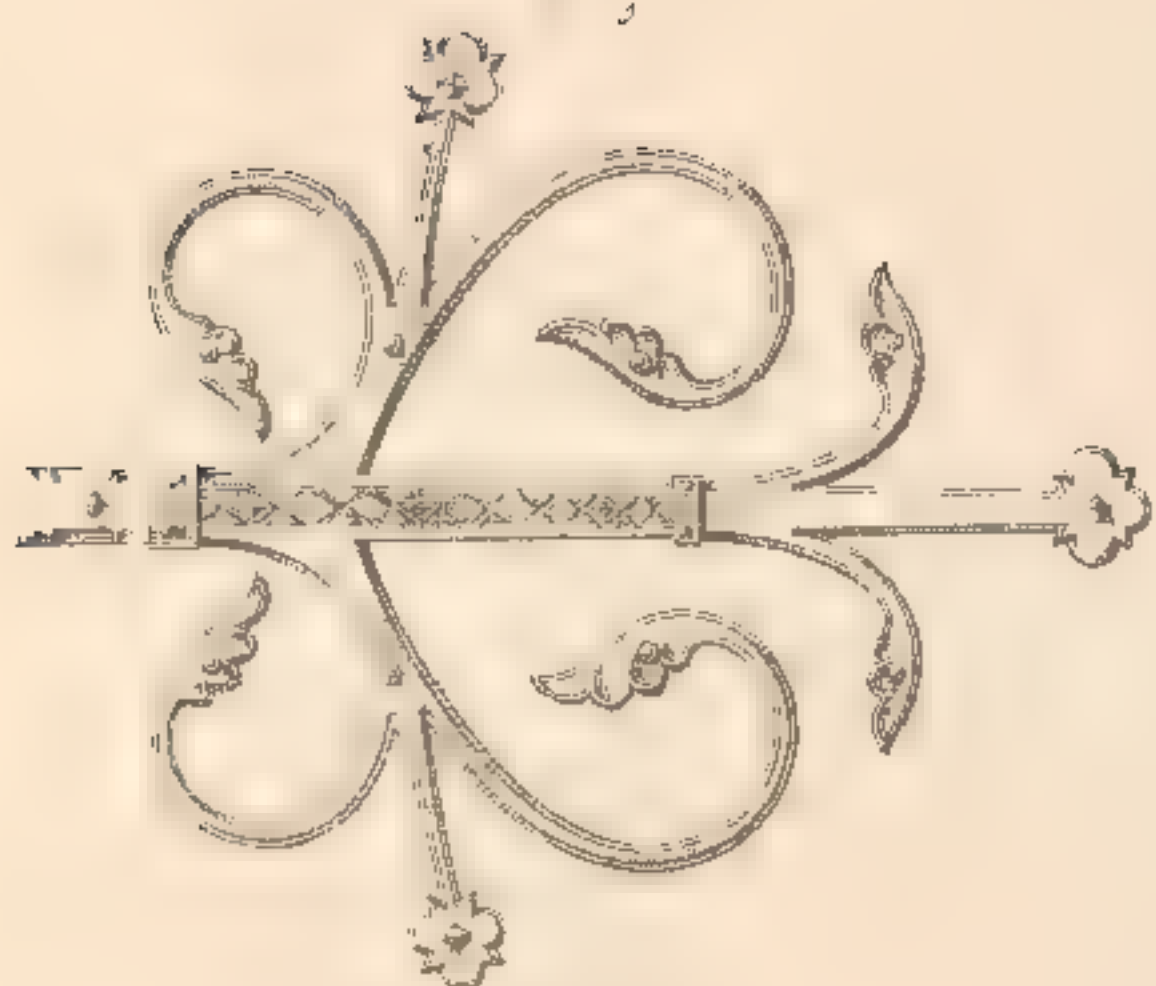
2 4

N^o 6

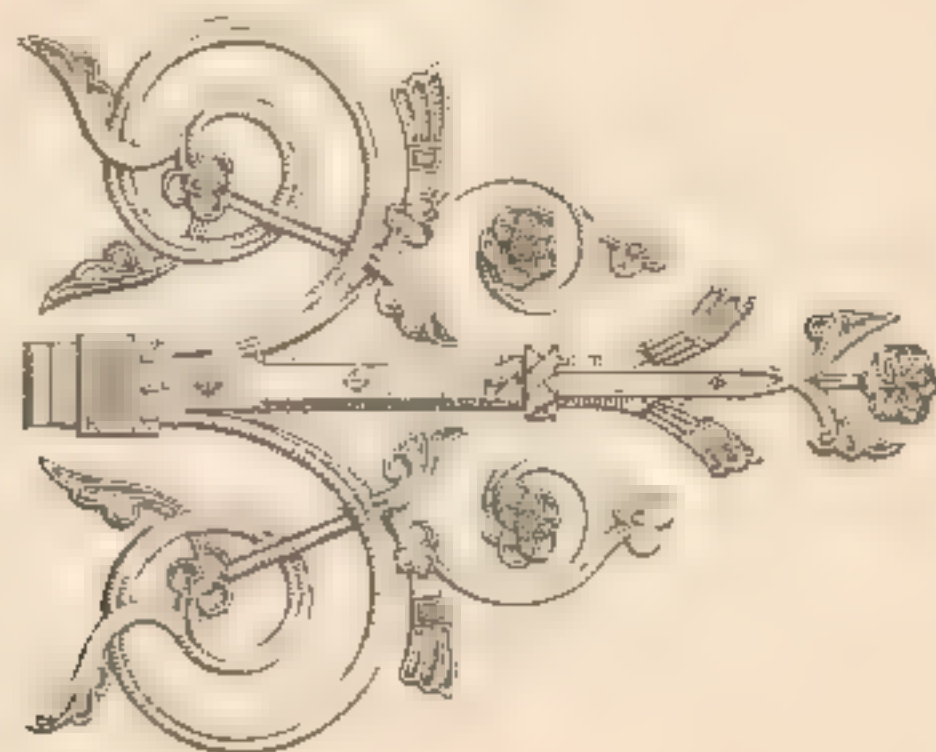
2 2

SCALE 1 INCH = 1 FOOT

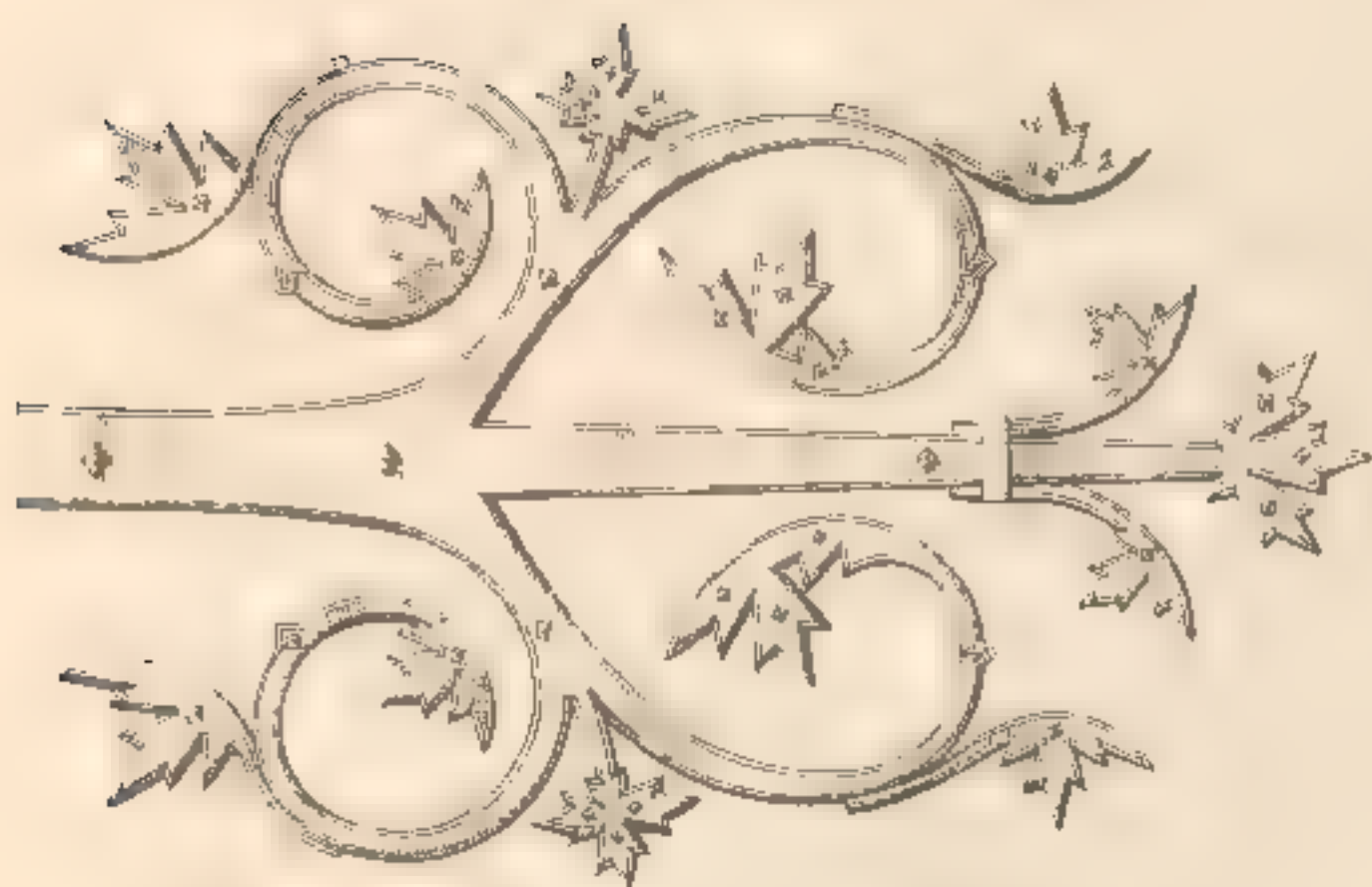
MACFARLANE'S HINGES



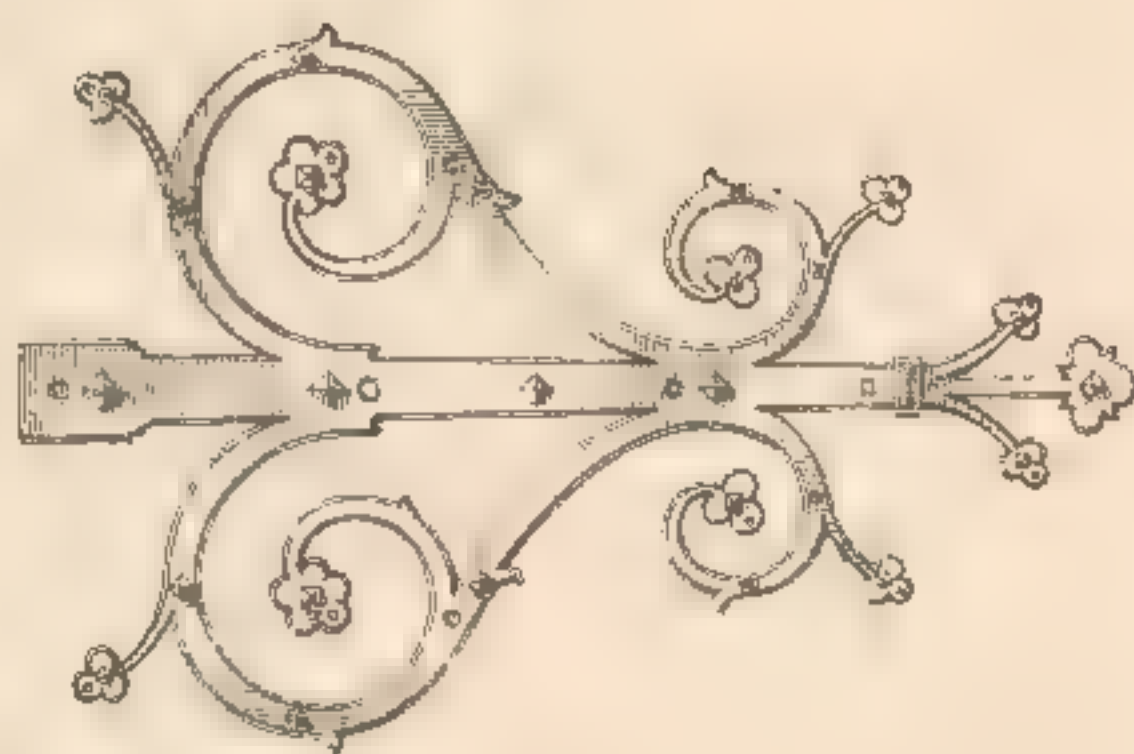
No. 1



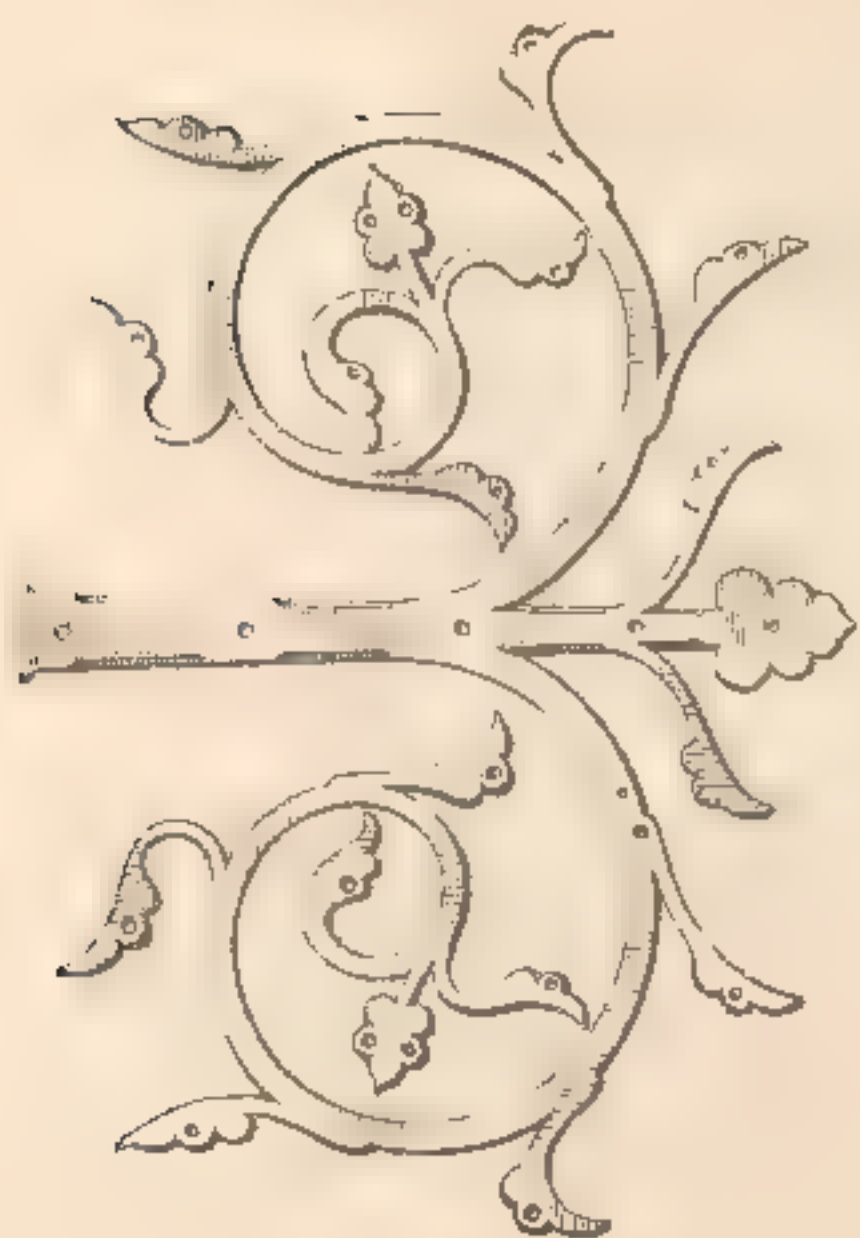
No. 2



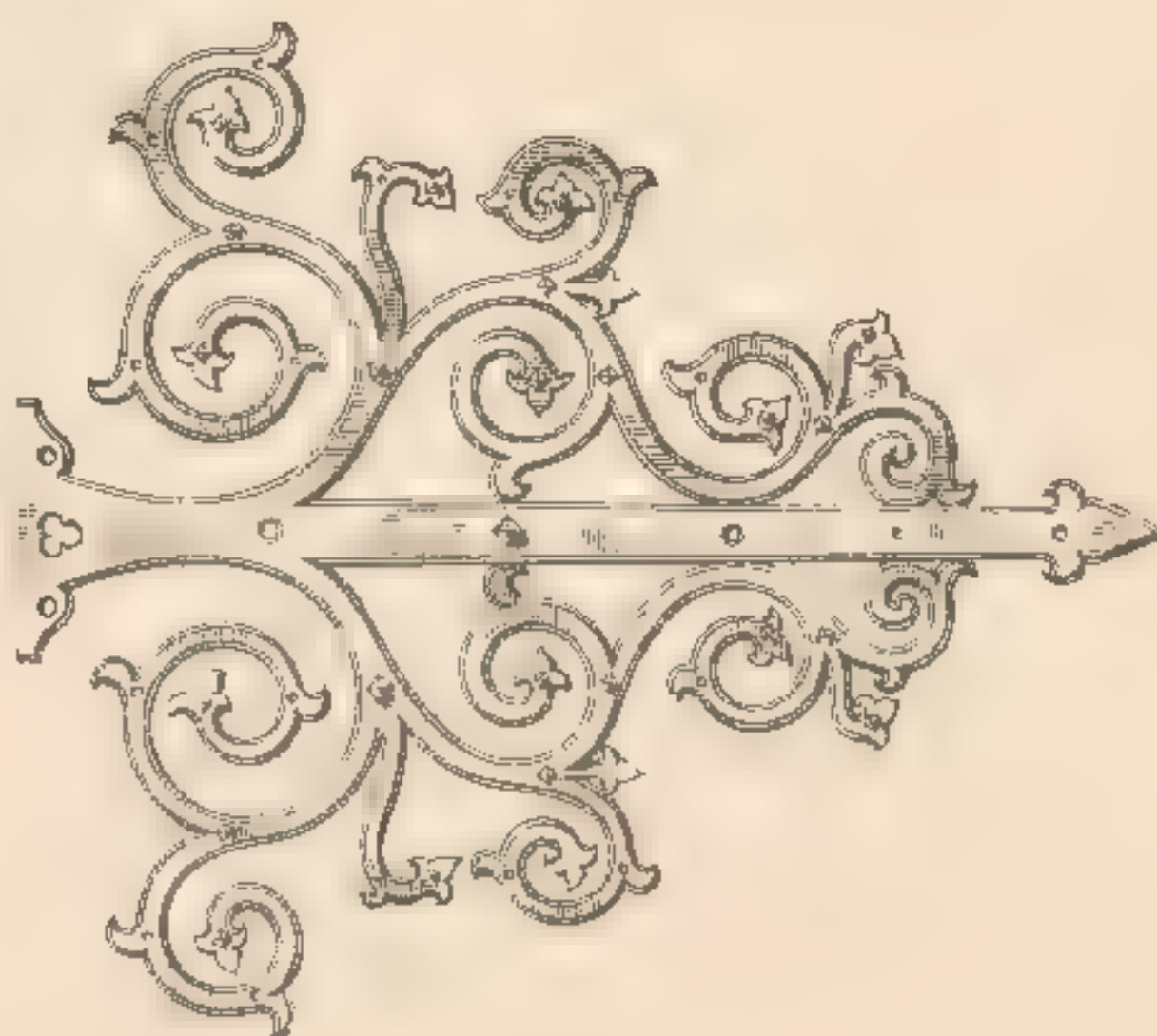
No. 3



No. 4



No. 5



No. 6

No. 7

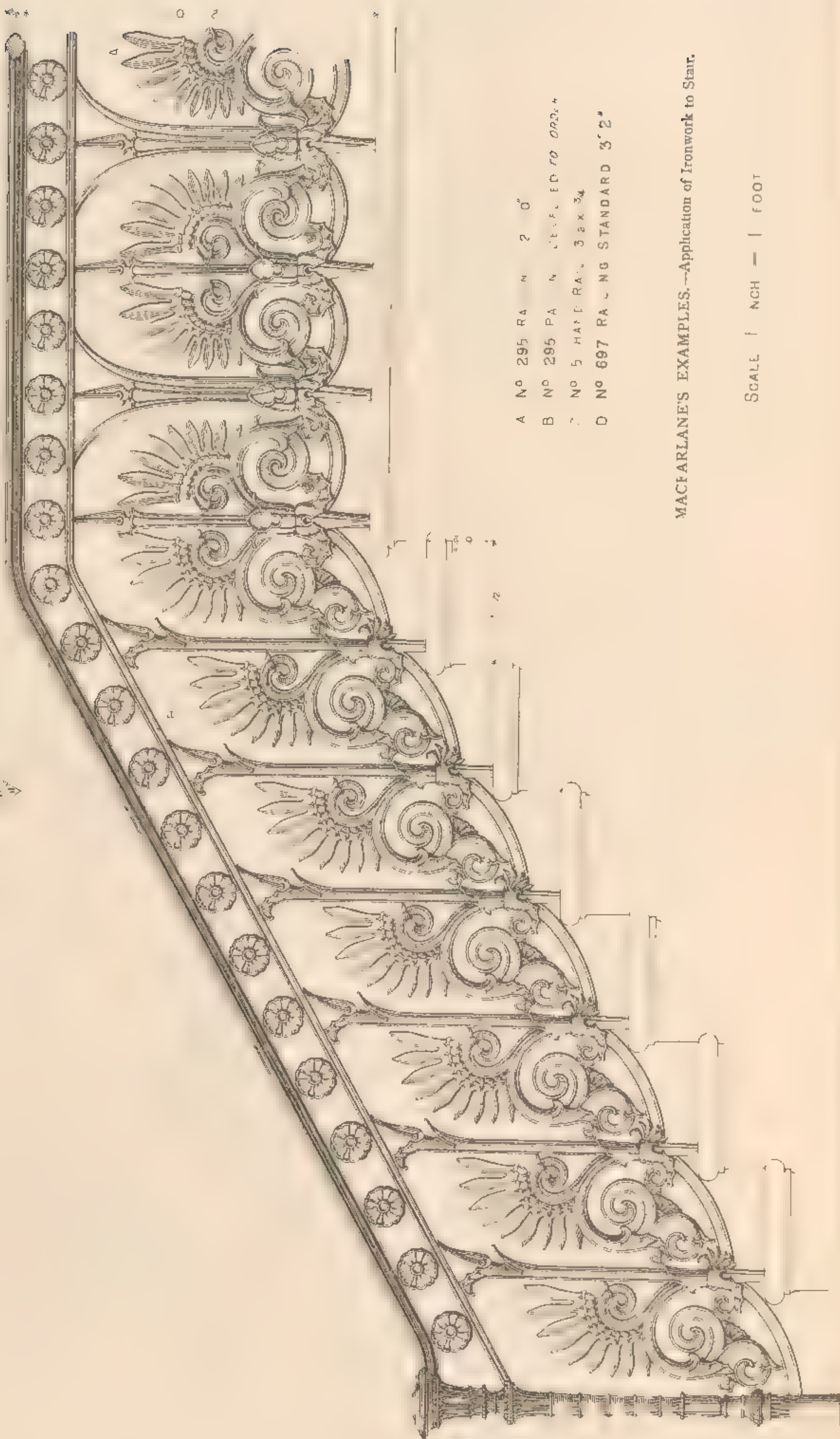
No. 8

SCALE 1/4" = 1 FOOT

MACFARLANE'S STAIR RAILING

Nº 641.

1 23
23 61
61 23
23 1

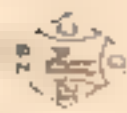


- A Nº 295 RAILING 2' 0"
B Nº 295 PAINTED TO ORDER
C Nº 5 HAND RAIL 3 1/2 x 3/4
D Nº 697 RAILING STANDARD 3' 2"

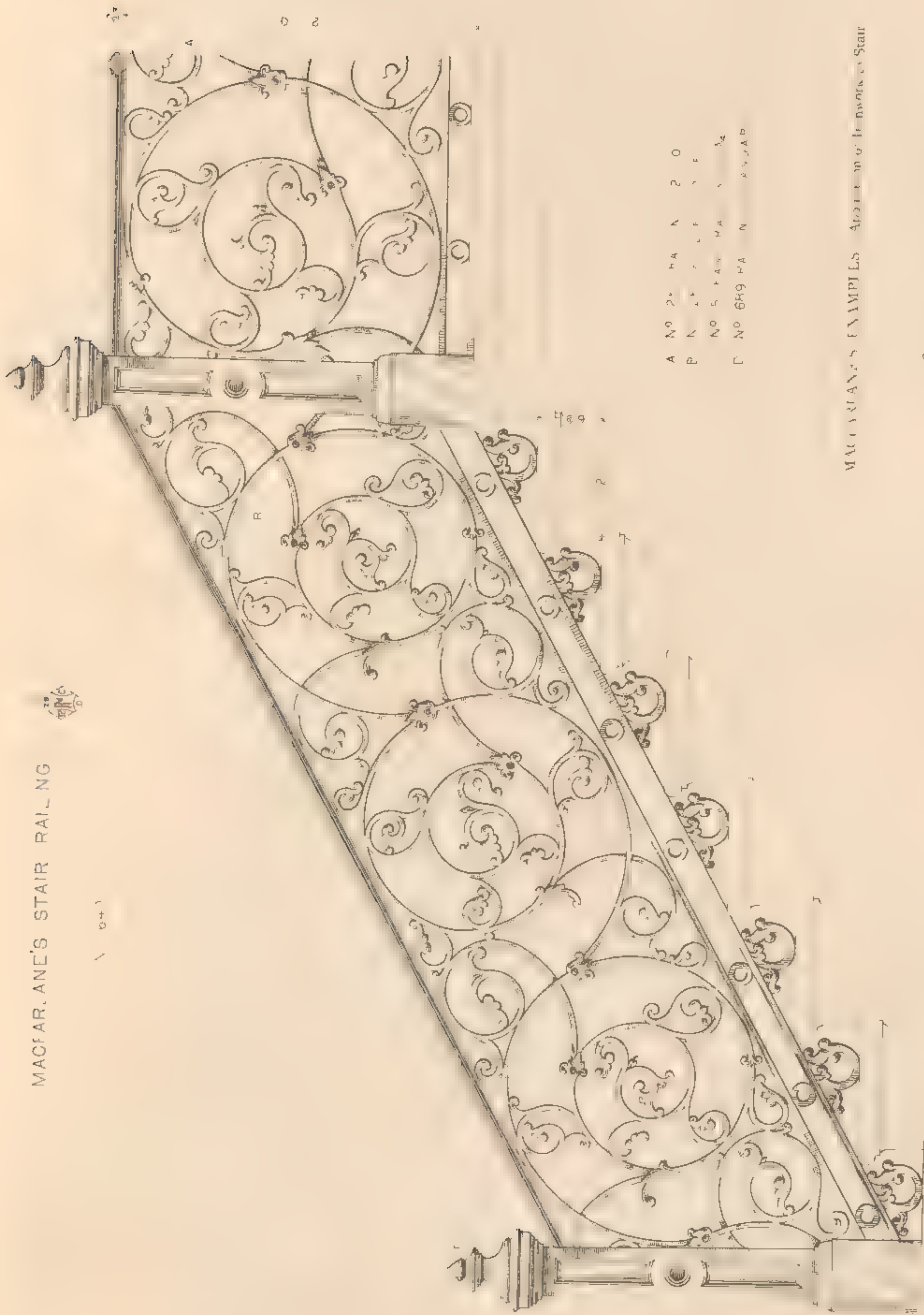
MACFARLANE'S EXAMPLES.—Application of Ironwork to Stair.

SCALE 1 INCH = 1 FOOT

MACFARLANE'S STAIR RAILING



1047



A No 20 H A N 2 0
 B N 20 H A N 2 0
 C No 20 H A N 2 0
 D No 20 H A N 2 0

MACFARLANE'S STAIR RAILING

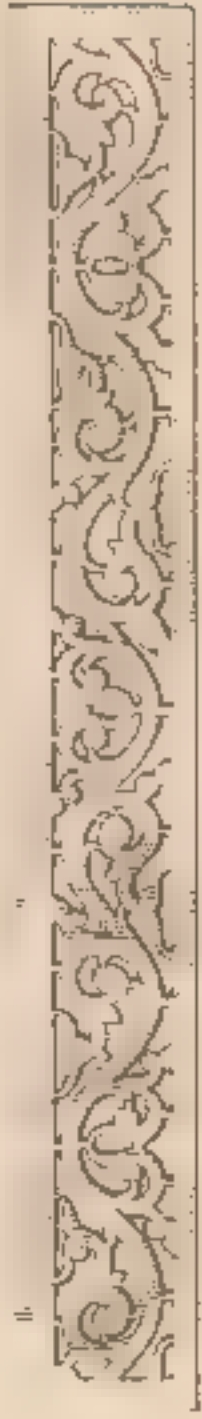
1047

MACFARLANE'S STAIRS AND STAIR RAILINGS

TREAD

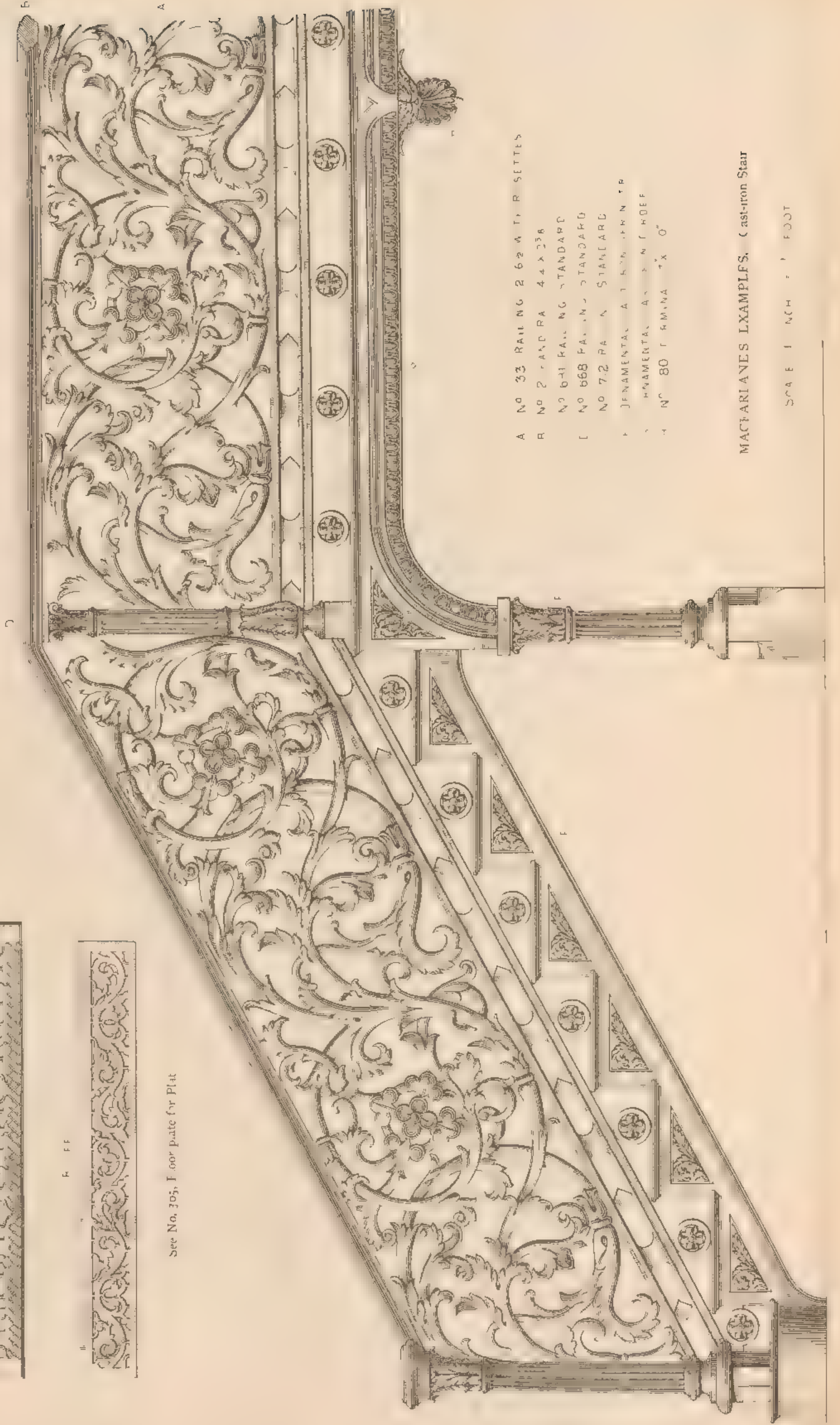


R. F. F.



See No. 305, Floor plate for Plat

No 643



- A No 33 RAILING 2 62 W T. R SETTES
- R No 2 HAND RA 44 X 238
- No 641 RAILING STANDARD
- C No 668 RAILING STANDARD
- No 72 RAILING STANDARD
- F JENAMENTAL AT 5.00. 1.00. 1.00
- G JENAMENTAL AT 5.00. 1.00. 1.00
- H No 80 JENAMENTAL 1 X 0

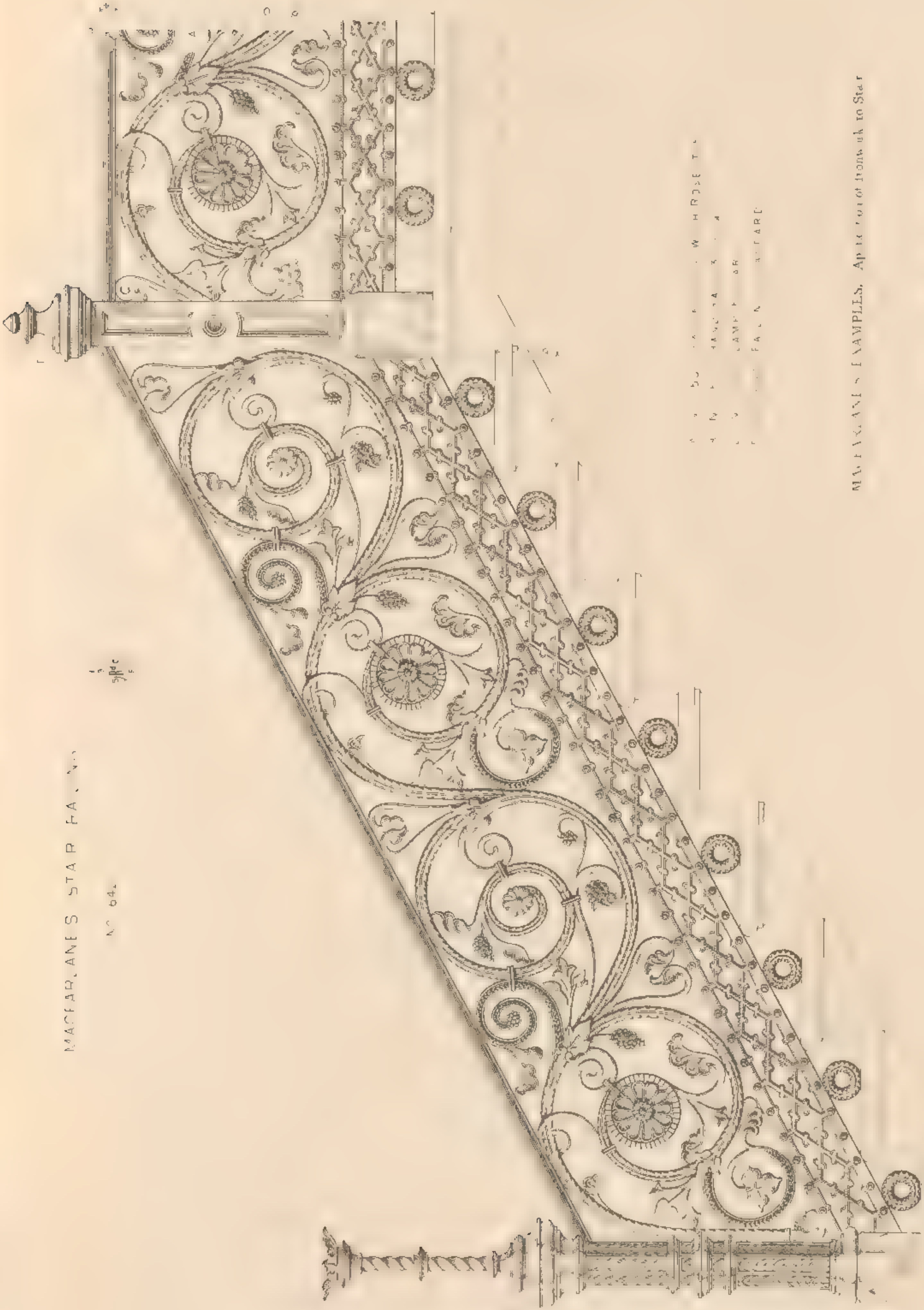
MACFARLANE'S STAIRS, Cast-iron Stair

SCALE 1 INCH = 1 FOOT

MACFARLANE'S STAR PATENT

No 64.

$\frac{1}{2}$ in
to scale

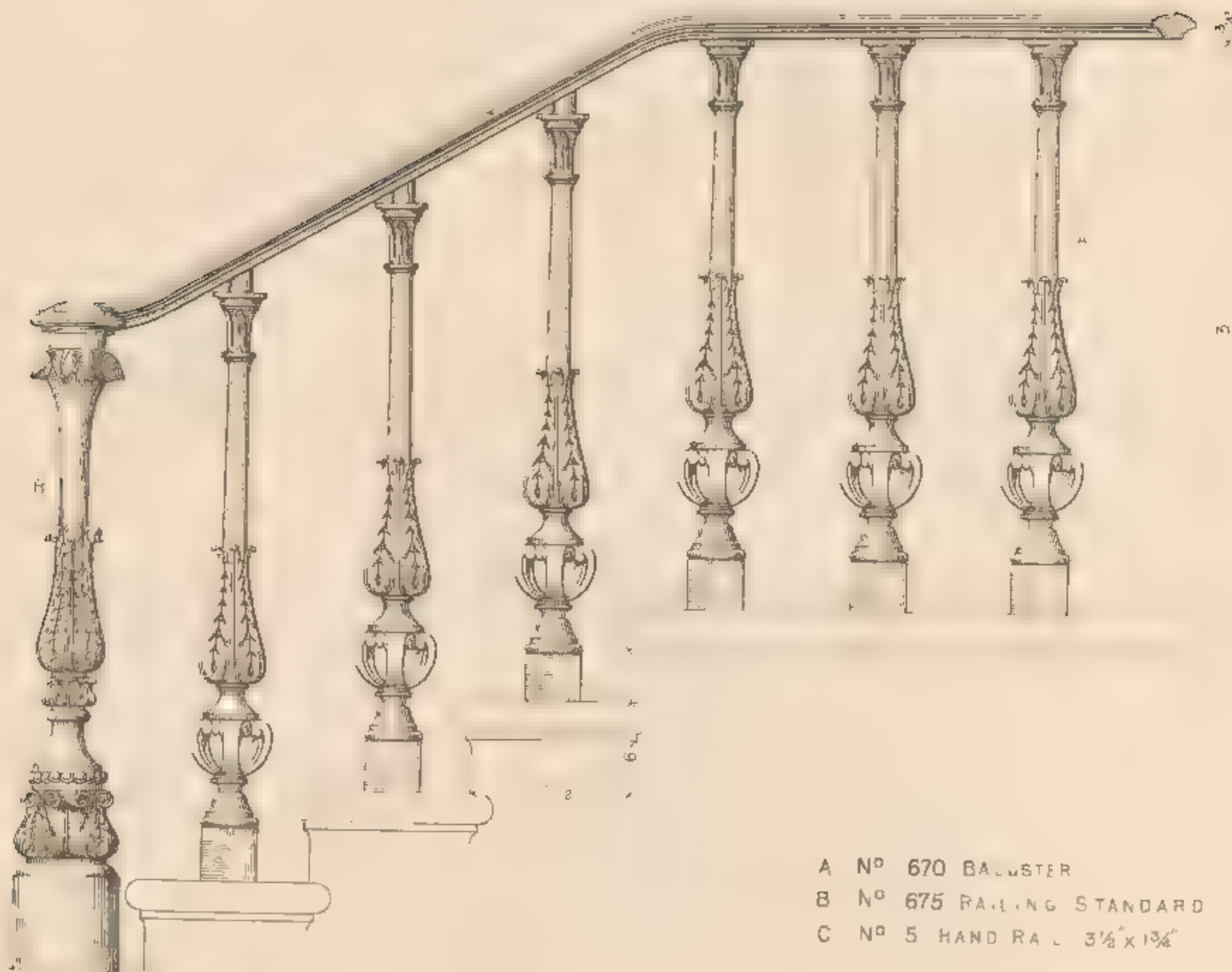


TO BE HAD OF THE
AUTHOR, 10, W. H. R. J. E. T. S.
LONDON, AND OF THE
LONDON, AND OF THE
LONDON, AND OF THE

MACFARLANE'S PATENT, APPLICABLE TO STAR

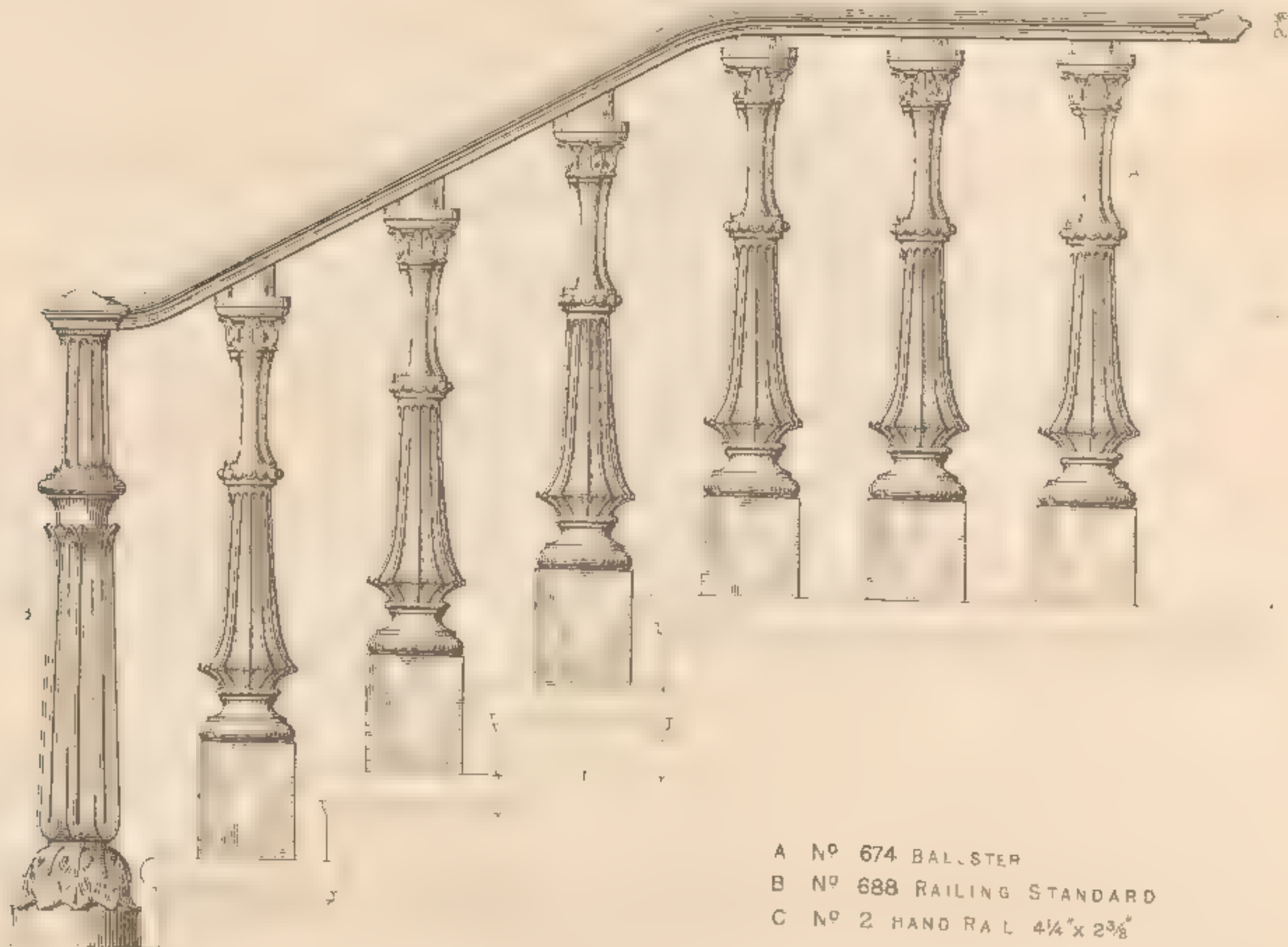
ALL RIGHTS RESERVED

Nº 670



- A Nº 670 BALUSTER
 B Nº 675 RAILING STANDARD
 C Nº 5 HAND RAIL $3\frac{1}{8} \times 1\frac{3}{4}$ "

Nº 674



- A Nº 674 BALUSTER
 B Nº 688 RAILING STANDARD
 C Nº 2 HAND RAIL $4\frac{1}{4} \times 2\frac{3}{8}$ "

MACFARLANE'S EXAMPLES.—Application of Ironwork to Stair.

SCALE 1 INCH = 1 FOOT

SECTION VI.—PANELS.

MACFARLANE'S PANELS

N^o 27

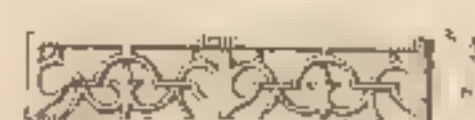
One face.

N^o 300

One face.

N^o 301

B' 4"

N^o 238

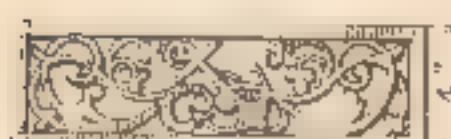
2"

N^o 227

One face.

N^o 227

One face.

N^o 254N^o 39

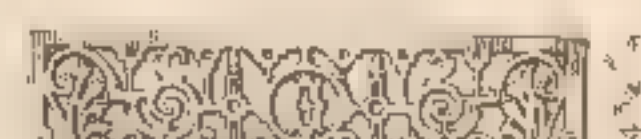
2"

N^o 391

4 3/4"

N^o 39

1 4"

N^o 369

6 1/4"

N^o 334

5"

N^o 334

9 1/2"

N^o 334

20 1/2"

N^o 87

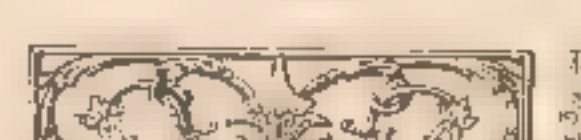
2 3/4"

N^o 26

One face.

N^o 57

3 0"

N^o 57

1 5"

N^o 38

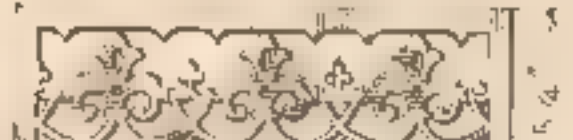
2 4"

N^o 38

3 3"

N^o 270N^o 457

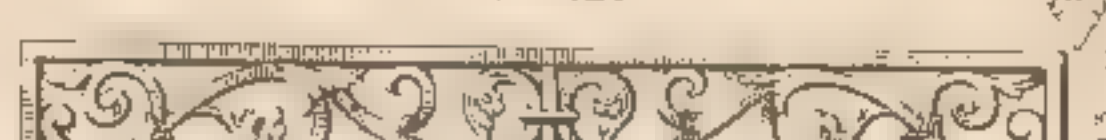
4 7/8"

N^o 38

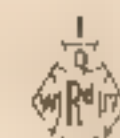
4 3/4"

N^o 381

2 2"

N^o 129

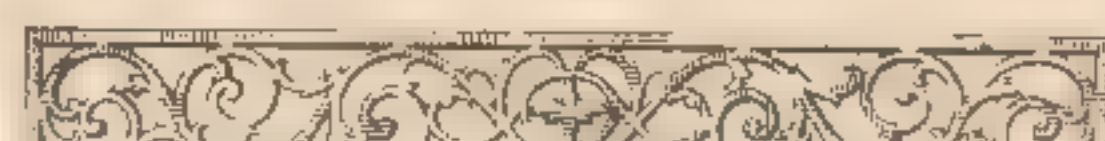
3 0 1/2"

N^o 265

3 1/2"

N^o 31

5"

N^o 311

7"

N^o 40

5 1/2"

N^o 344N^o 344

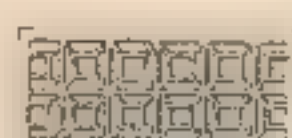
5 3/4"

N^o 344

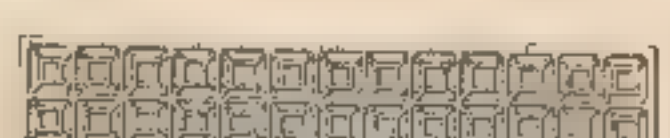
7 1/2"

N^o 344

9"

N^o 344

9 3/4"

N^o 344

9"

SCALE 1 INCH = FOOT

MACFARLANE'S PANELS

N° 92



One face

N° 92



One face

N° 92



One face

N° 265



N° 265



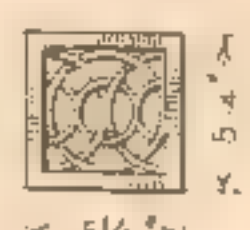
N° 265



N° 265

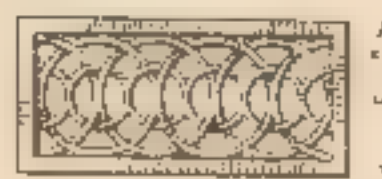


N° 53



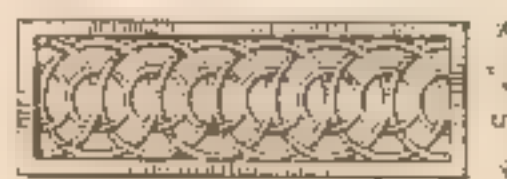
One face

N° 153



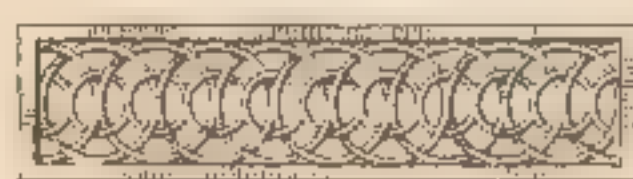
One face

N° 53



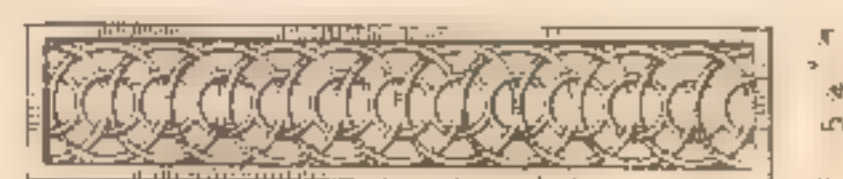
One face

N° 153



One face

N° 153



One face

N° 42



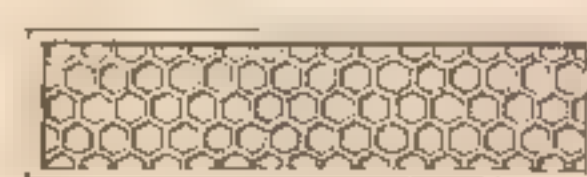
One face

N° 42



One face

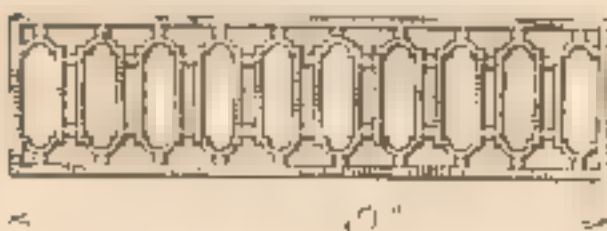
N° 330



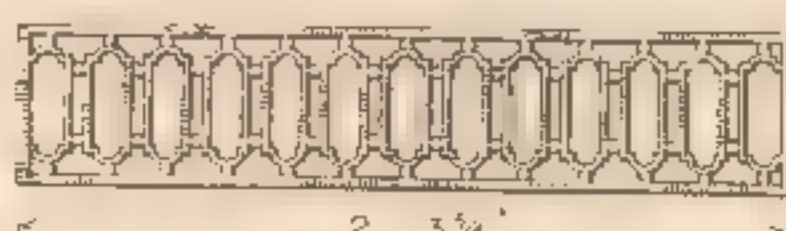
N° 334



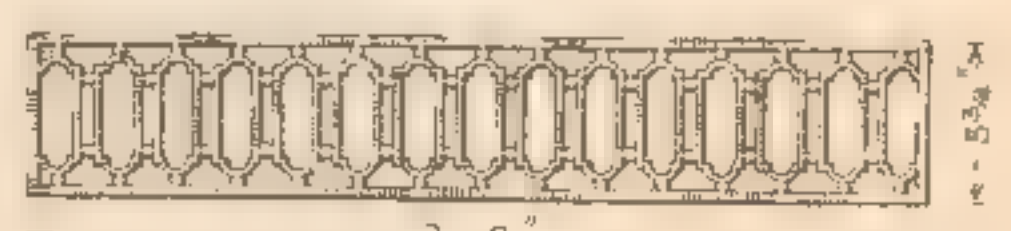
N° 334



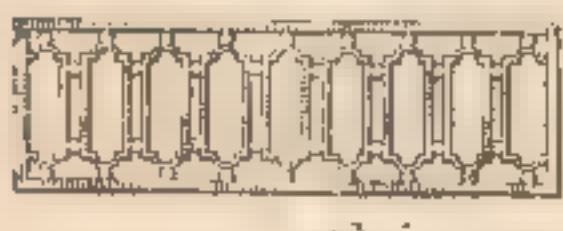
N° 334



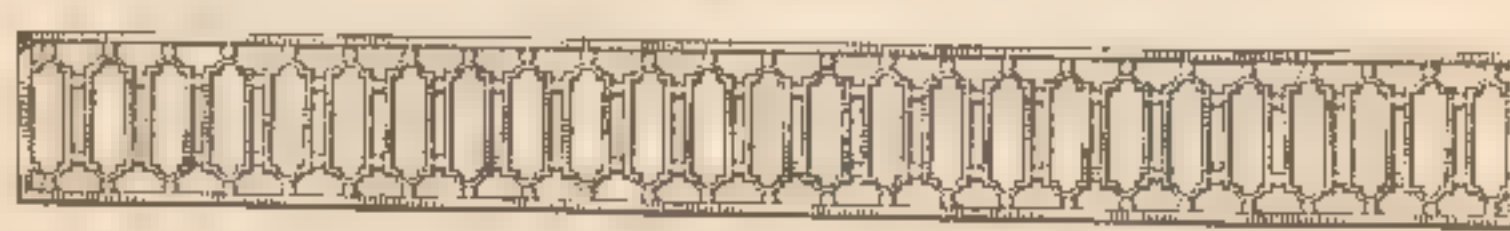
N° 334



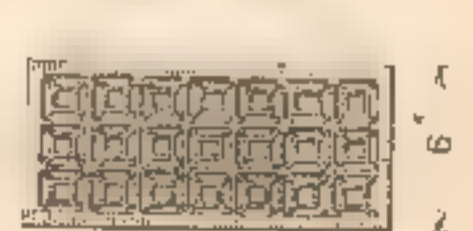
N° 334



N° 334



N° 344



N°



One face

N° 229



One face

N° 229



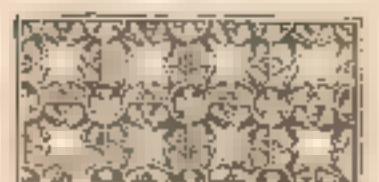
One face

N° 330



One face

N° 3



One face

N° 103



One face

N° 03



One face

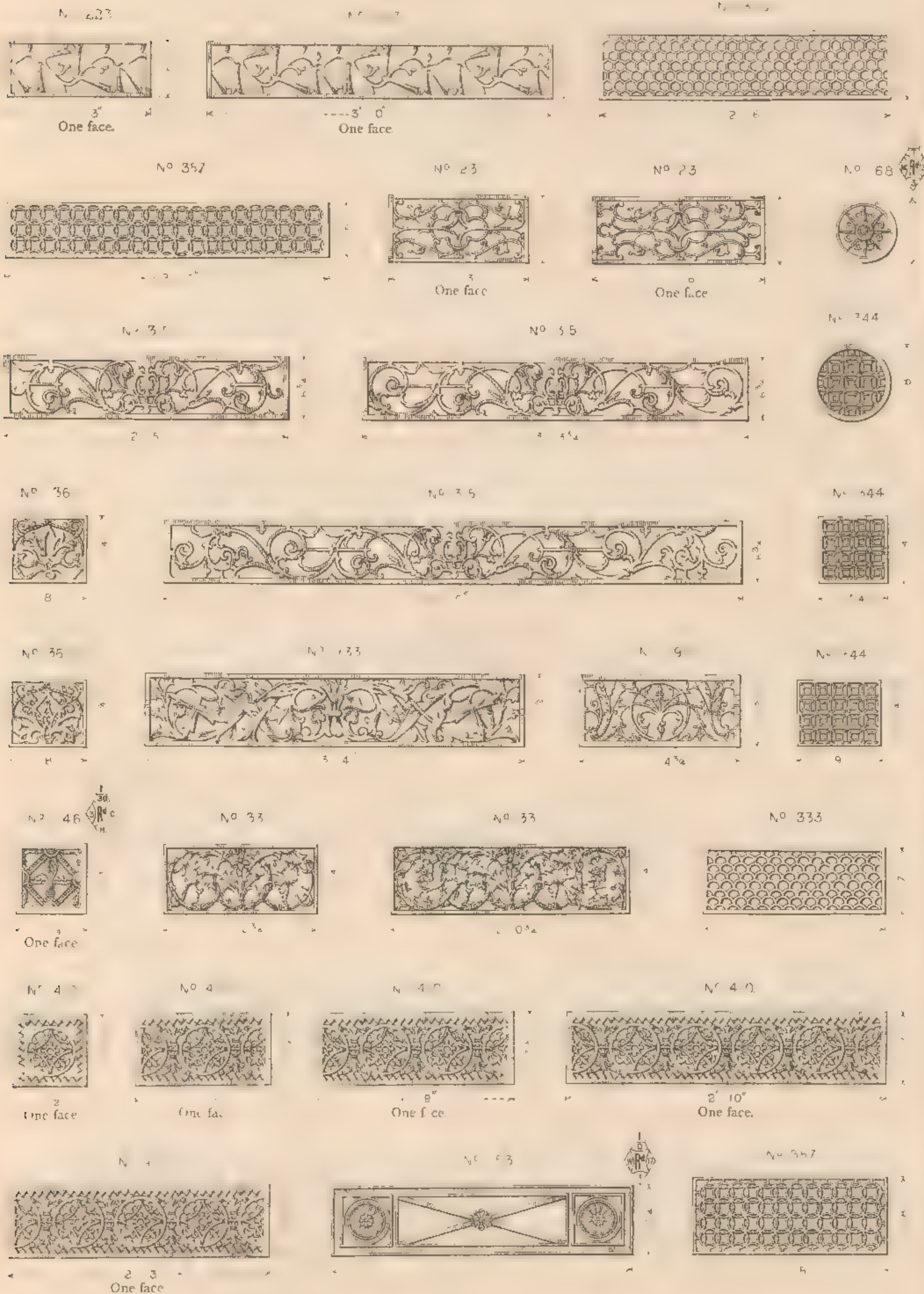
N° 103



One face

SCALE 1 INCH = 1 FOOT

MACFARLANE'S PANELS



SCALE 1 INCH = FOOT

MACFARLANE'S PANELS

N^o 12

One face.

N^o 09

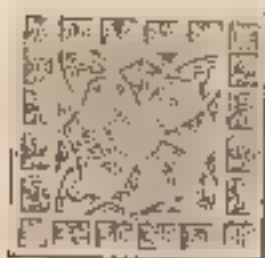
One face.

N^o 14

One face.

N^o 15

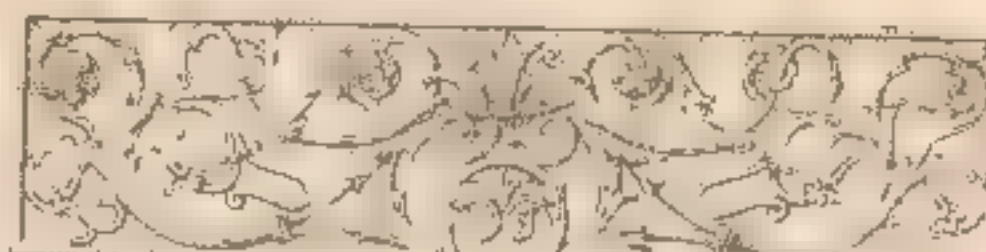
One face.

N^o 269

One face.

N^o 8

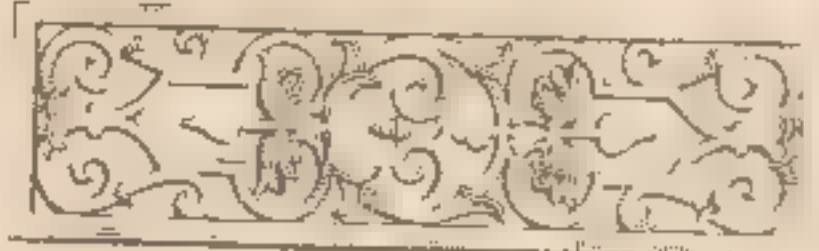
0'

N^o 8N^o 259

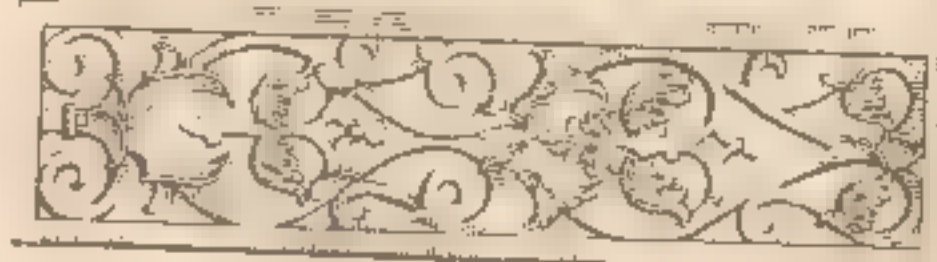
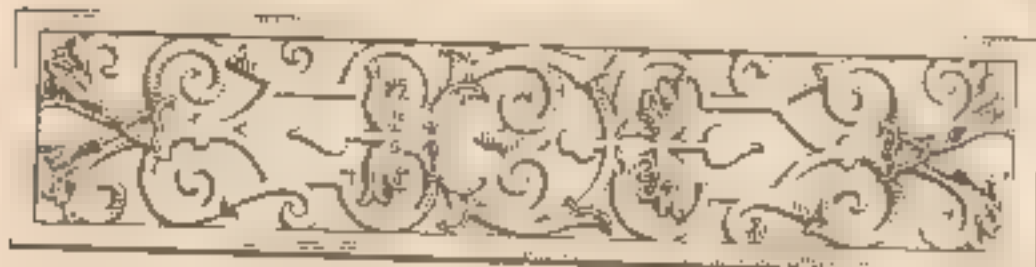
One face.

N^o 269

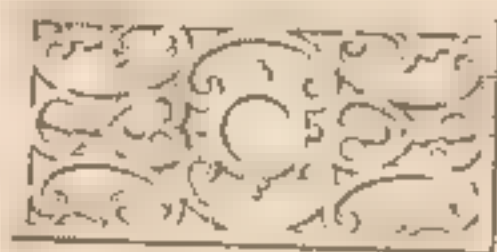
One face.

N^o 23

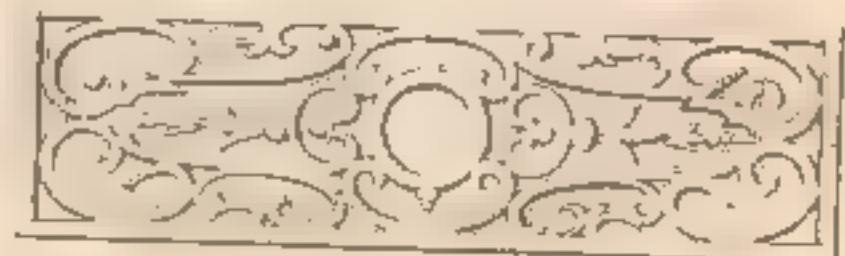
4'

N^o 29N^o 29

2'

N^o 34

1'

N^o 34

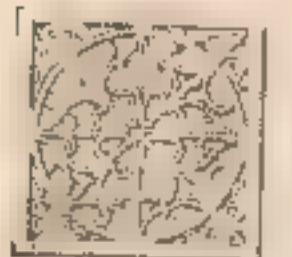
2'

N^o 34

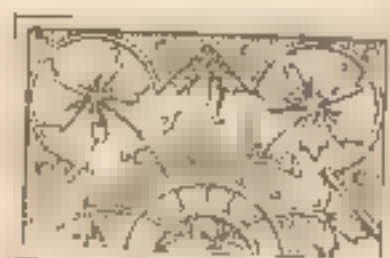
3'

N^o 270N^o 270

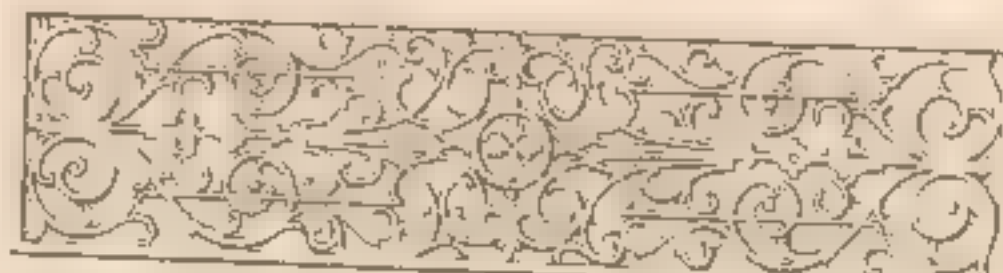
1 5/4'

N^o 340

8 1/2'

N^o 34

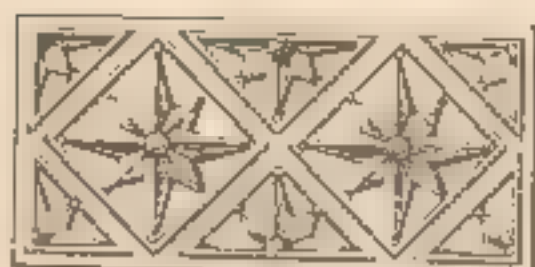
One face.

N^o 35

2' 6"

N^o 85

9 1/2'

N^o 85

6 1/4'

N^o 85

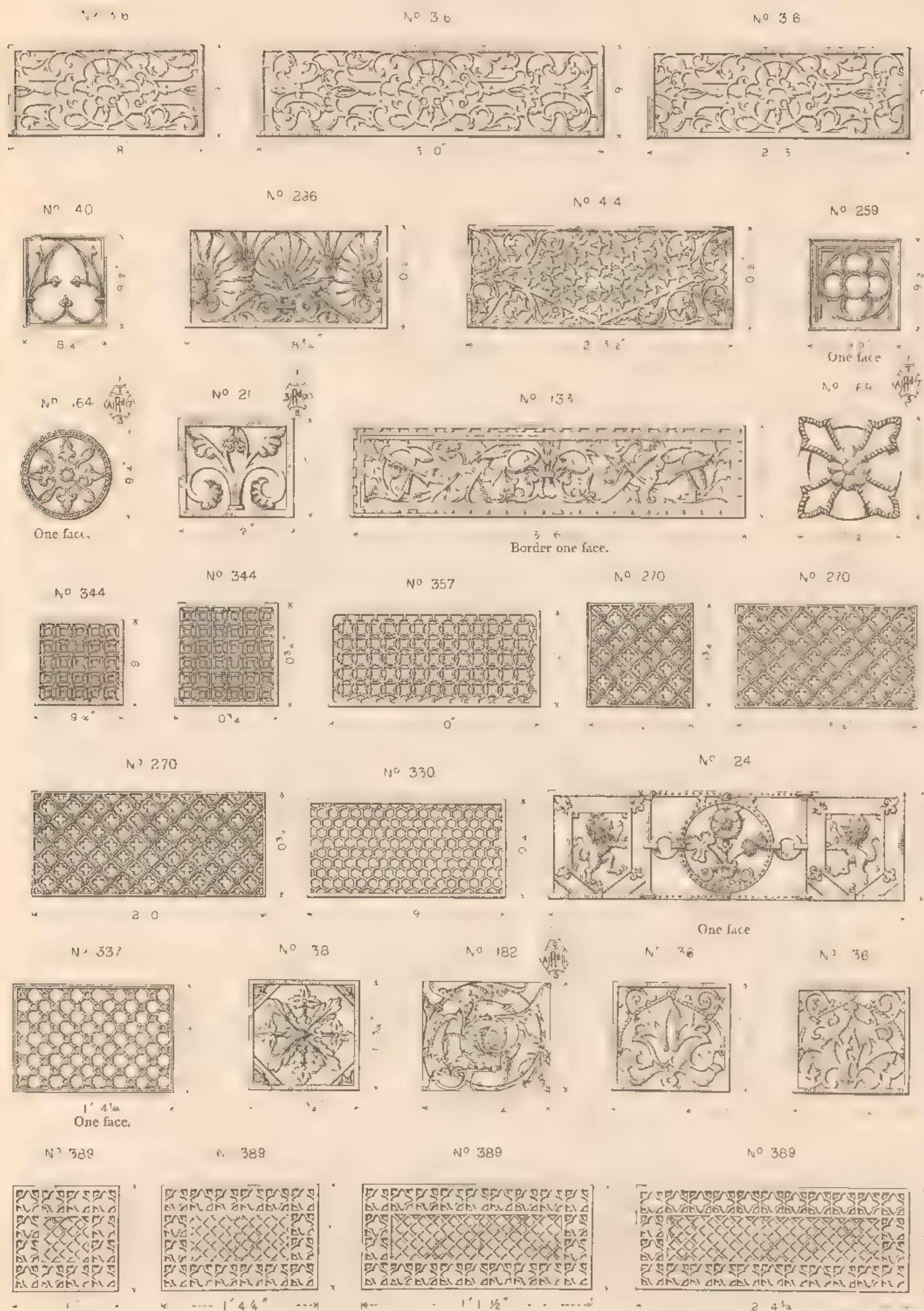
6 1/4'

N^o 85

2' 0 1/4"

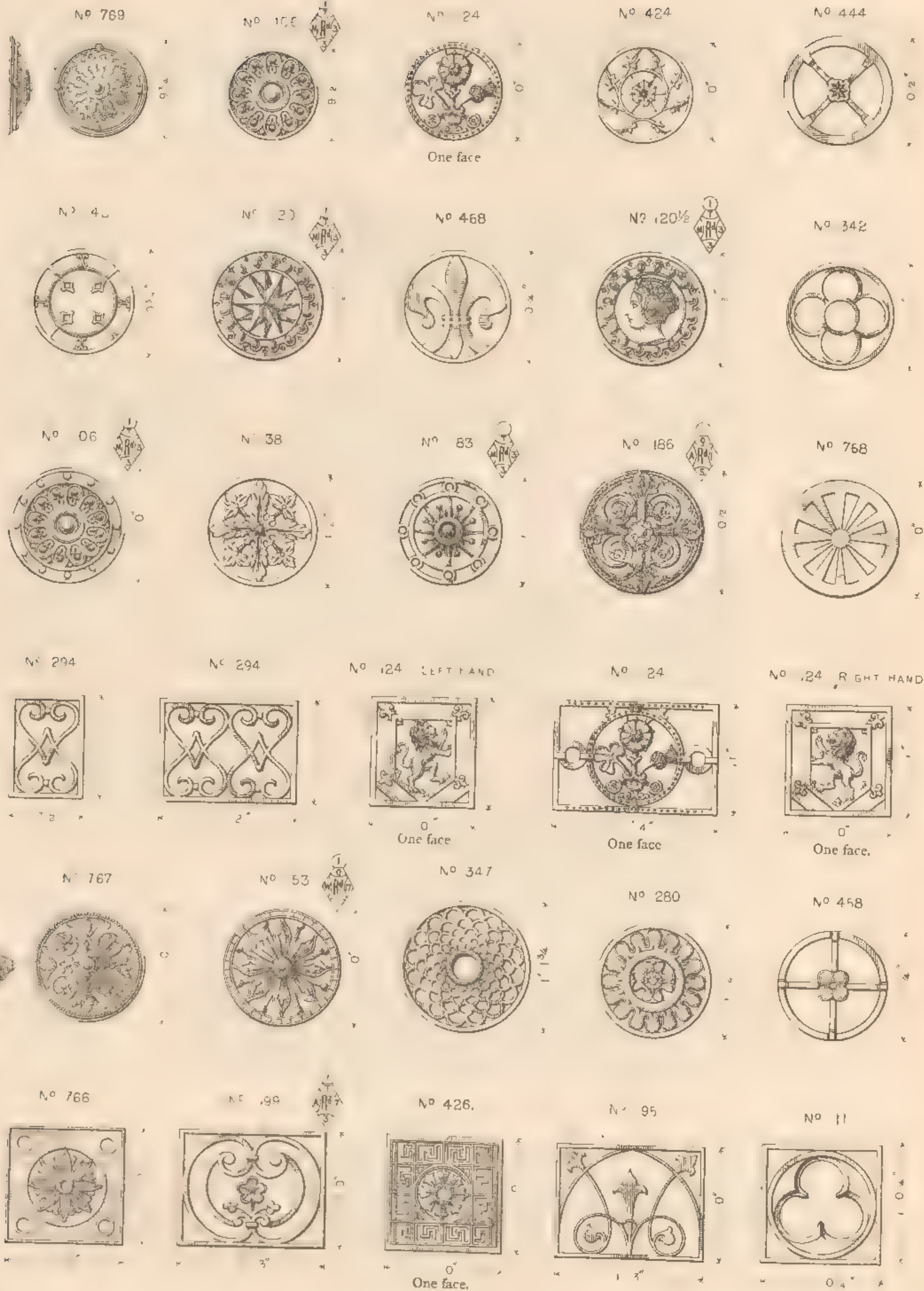
ALL NEW FOLD

MACFARLANE'S PANELS



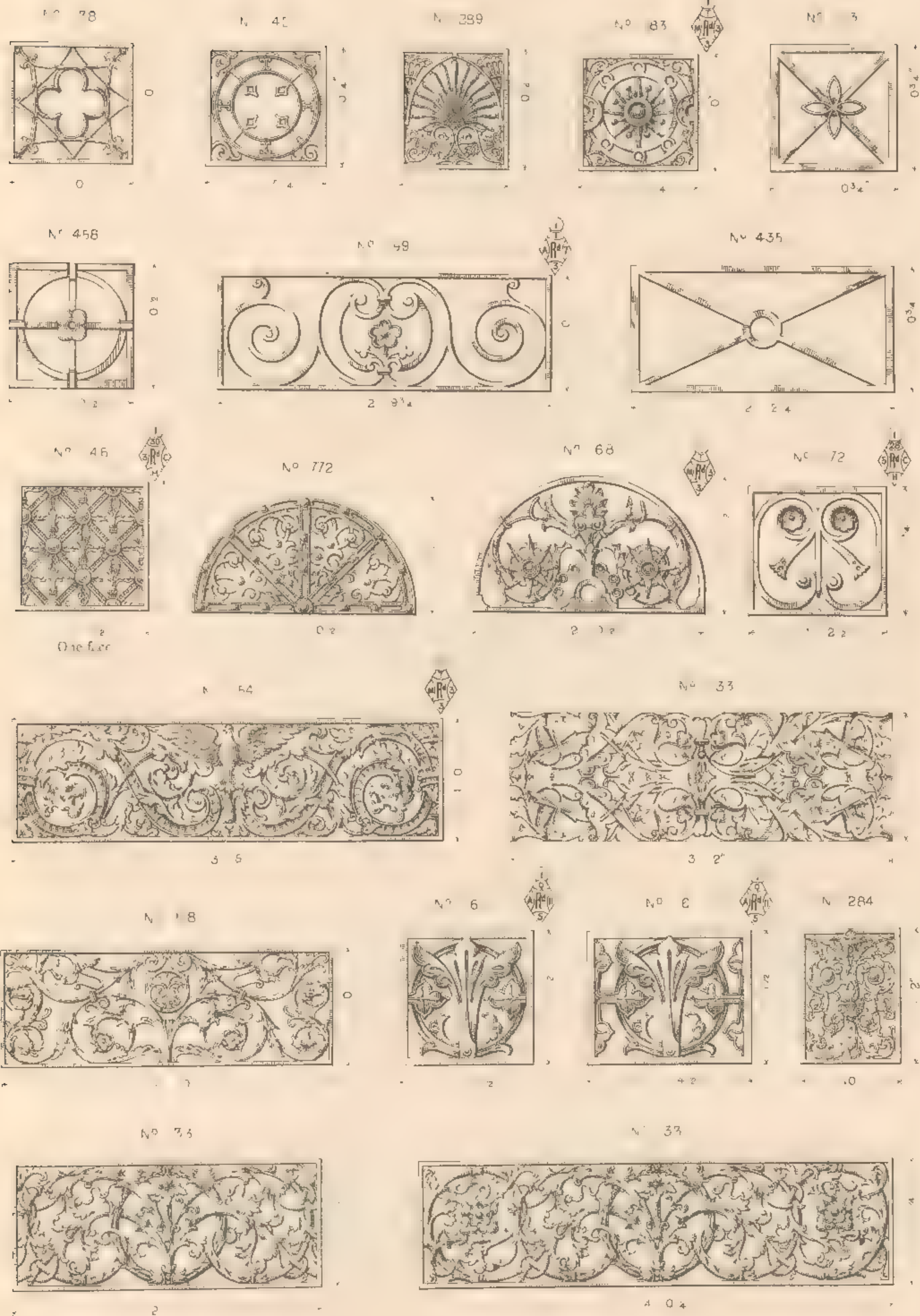
SCALE 1 INCH = FOOT

MACFARLANE'S PANELS



SCALE 1 INCH = 1 FOOT

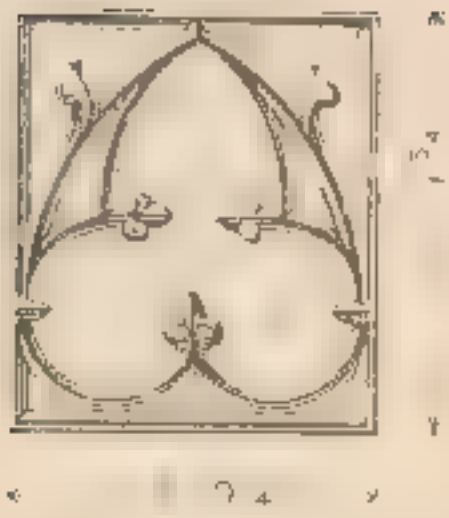
MACFARLANE'S PANELS



SCALE 1 INCH = FOOT

MACFARLANE'S PANELS

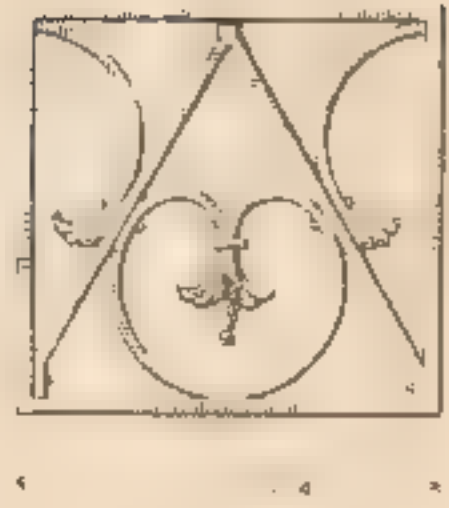
Nº 40



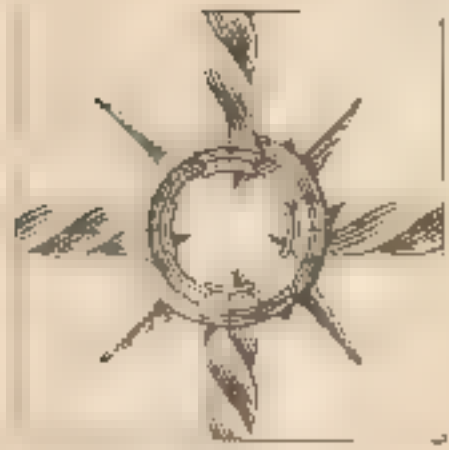
Nº 283



Nº 470



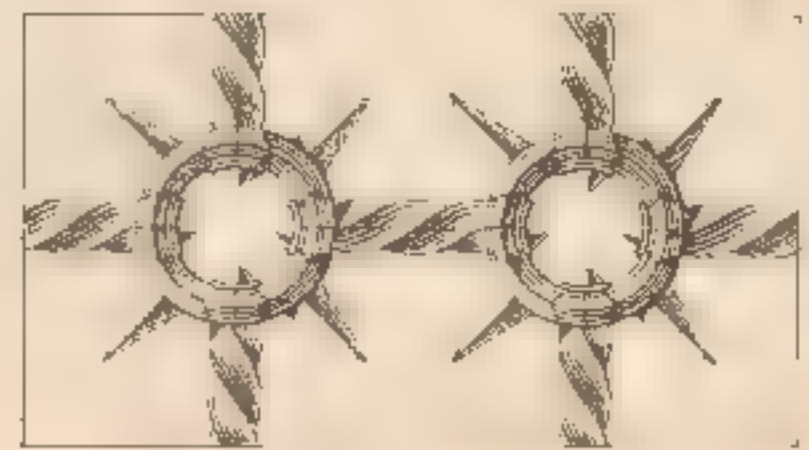
74



Nº 8



74

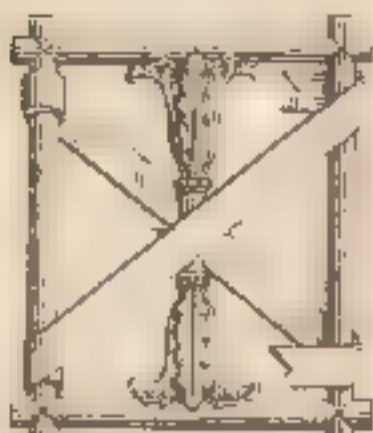


Nº 359



One face

75



Nº 281



Nº 473



Nº 370

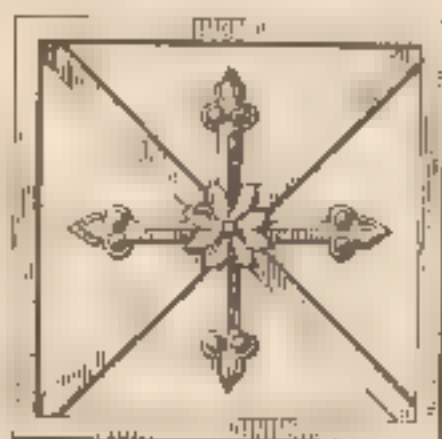


One face

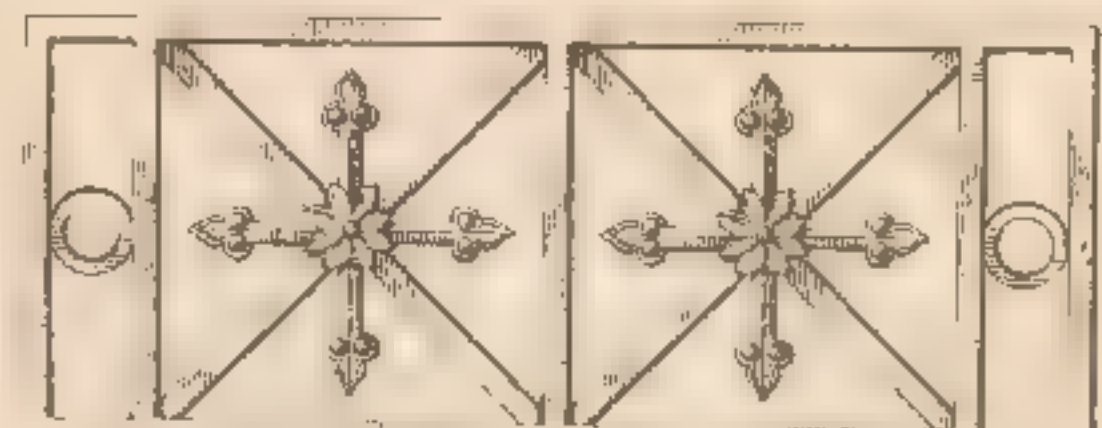
Nº 765



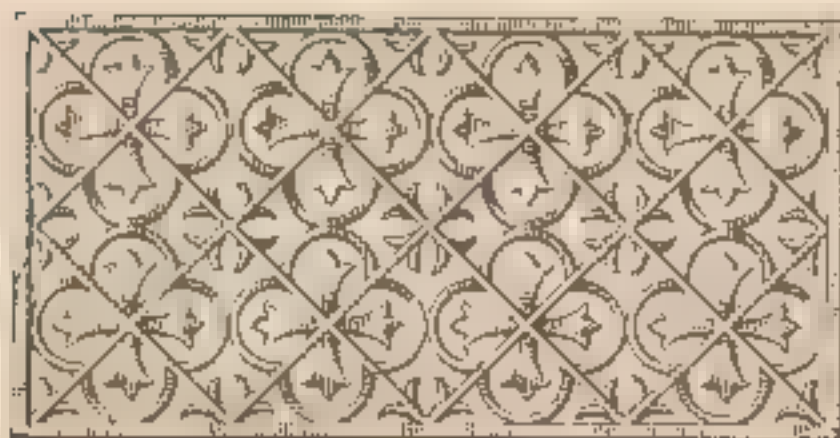
Nº 214



Nº 2,4



Nº 0+



One face

Nº 12+



One face

SCALE 1 INCH = 1 FOOT

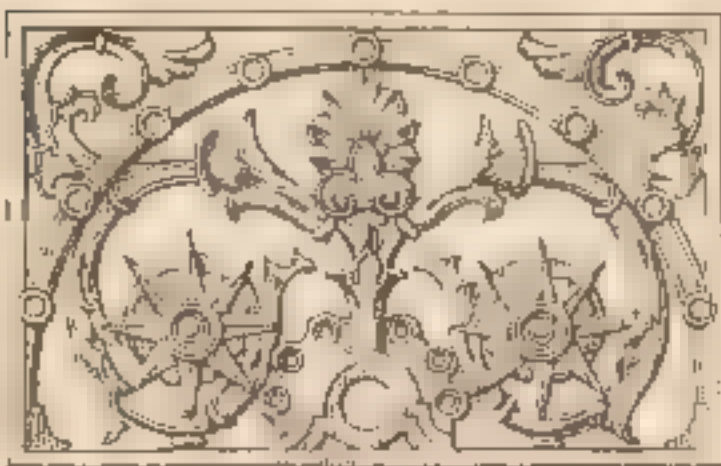
MACFARLANE'S PANELS

N^o 244

8 3/4"

N^o 303

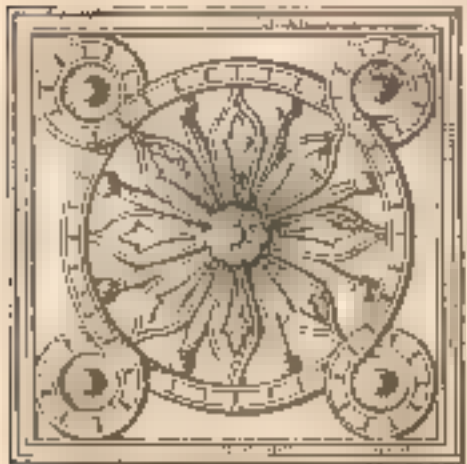
1' 0"

N^o 68

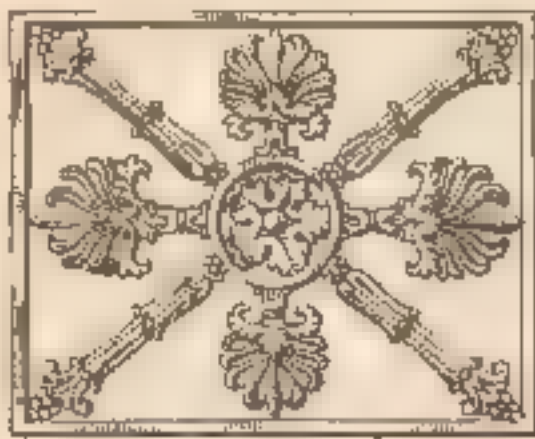
2'

N^o 48

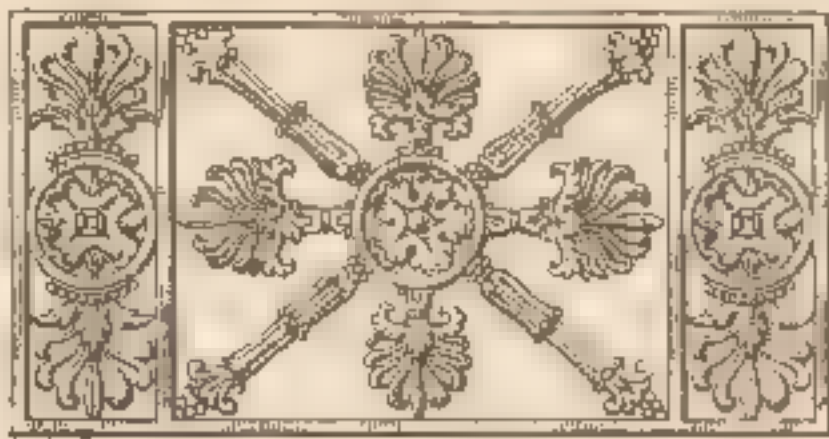
2'

N^o 53

1' 3"

N^o 24

1' 6 1/2"

N^o 24

2' 4"

N^o 46

0 1/2"

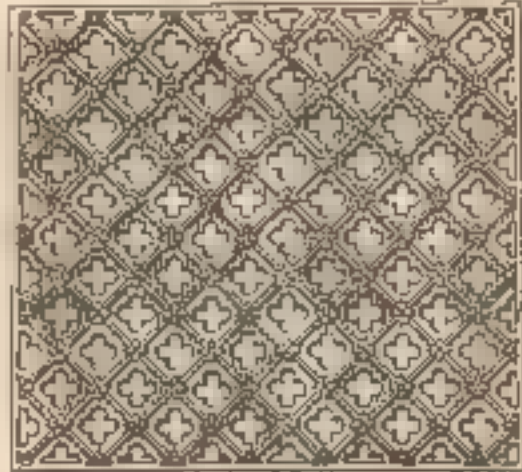
One face.

N^o 57

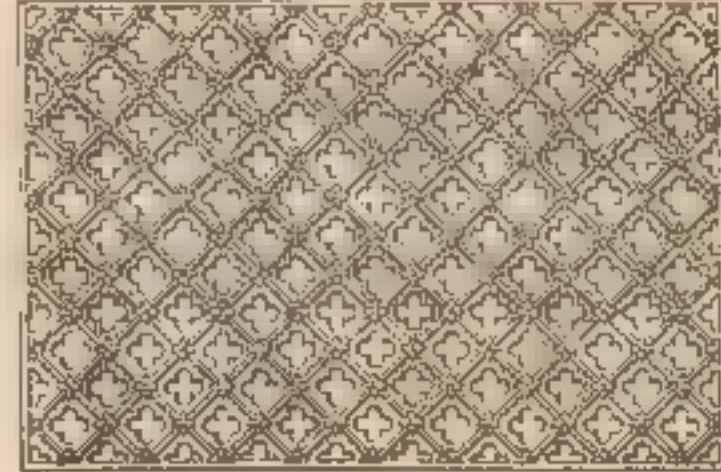
1'

N^o 185

1 1/2'

N^o 270

1 5/4'

N^o 270

2' 0"

N^o 292

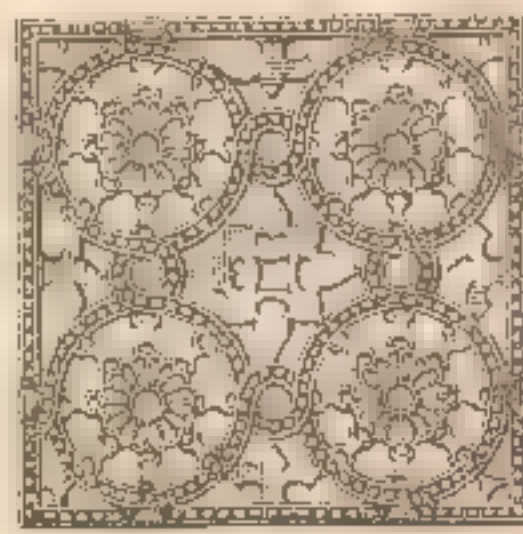
4'

N^o 36

4 1/2'

N^o 36

4 1/2'

N^o 29

5 1/2'

One face.

N^o 74

4 1/4'

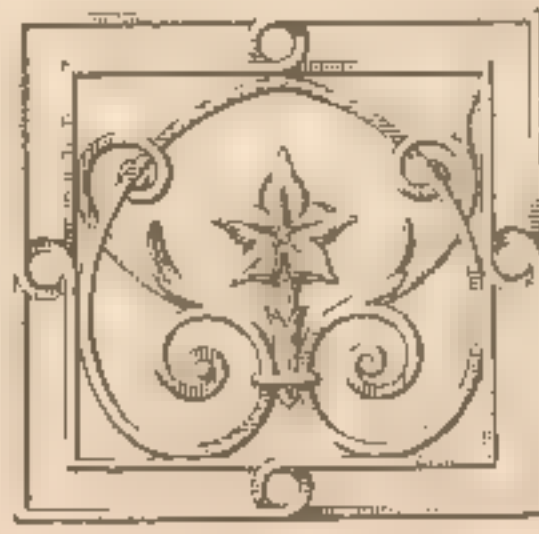
N^o 389

4 1/4'

N^o 467

4 1/2'

One face.

N^o 28

7'

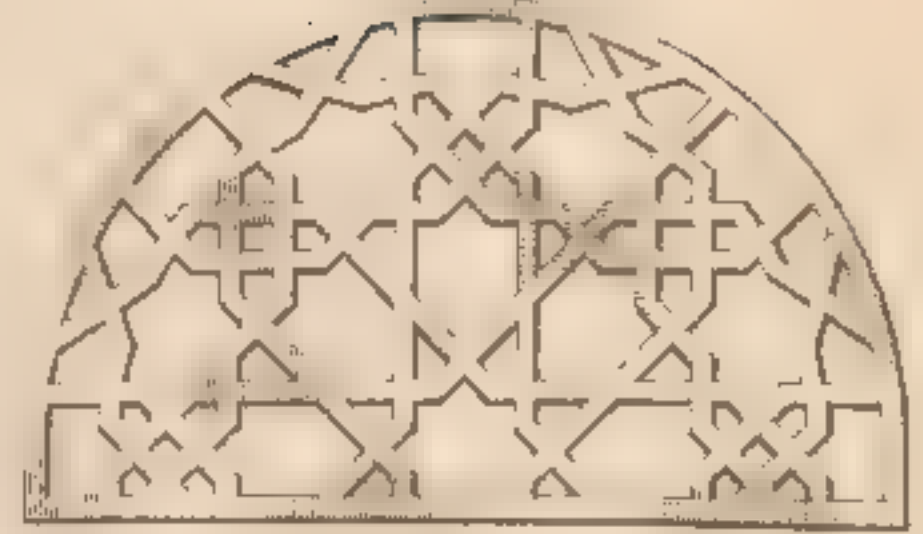
SCALE 1 INCH = FOOT

MACFARLANE'S PANELS

Nº 68

Nº 776

Nº 347

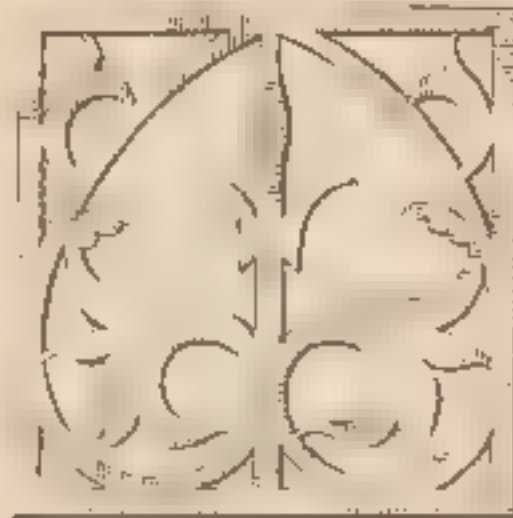
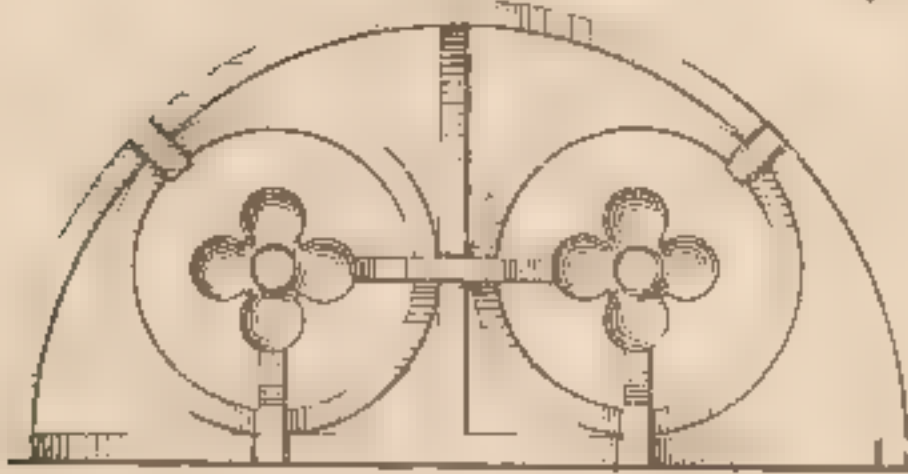


One face

Nº 480

Nº 2

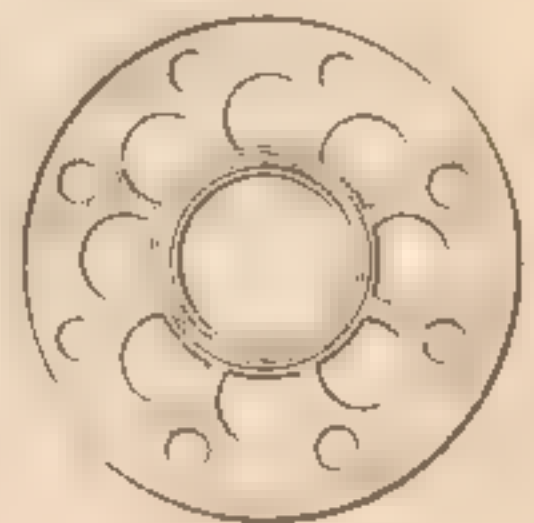
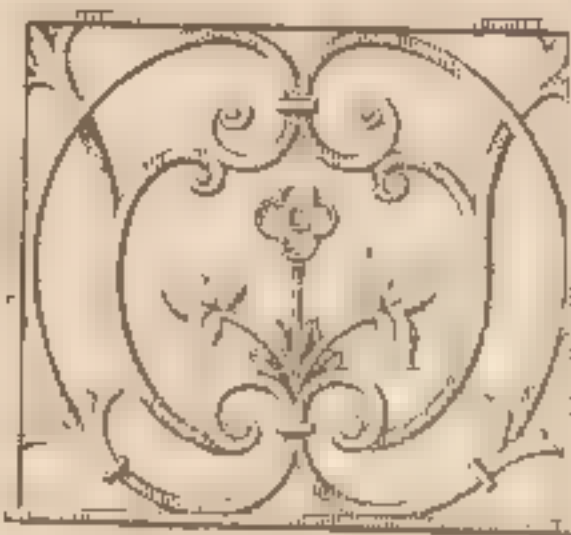
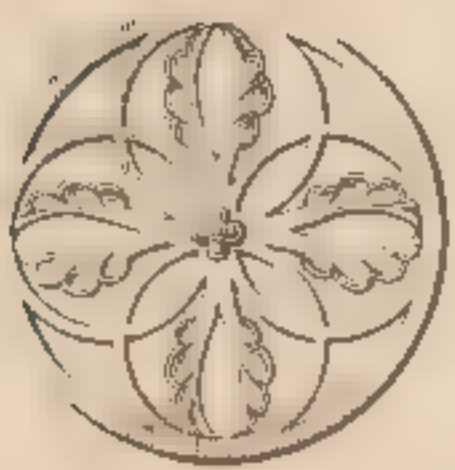
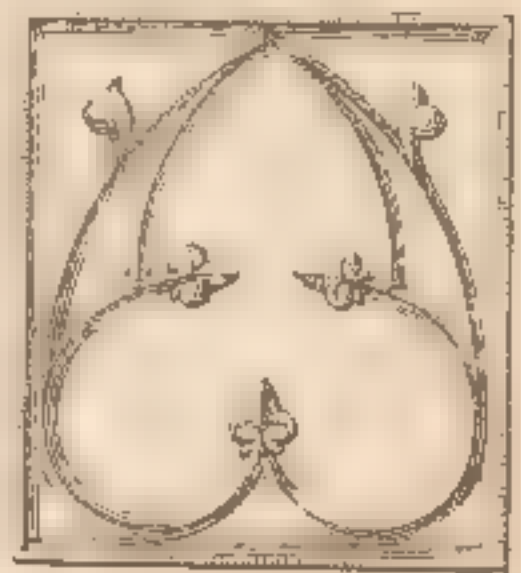
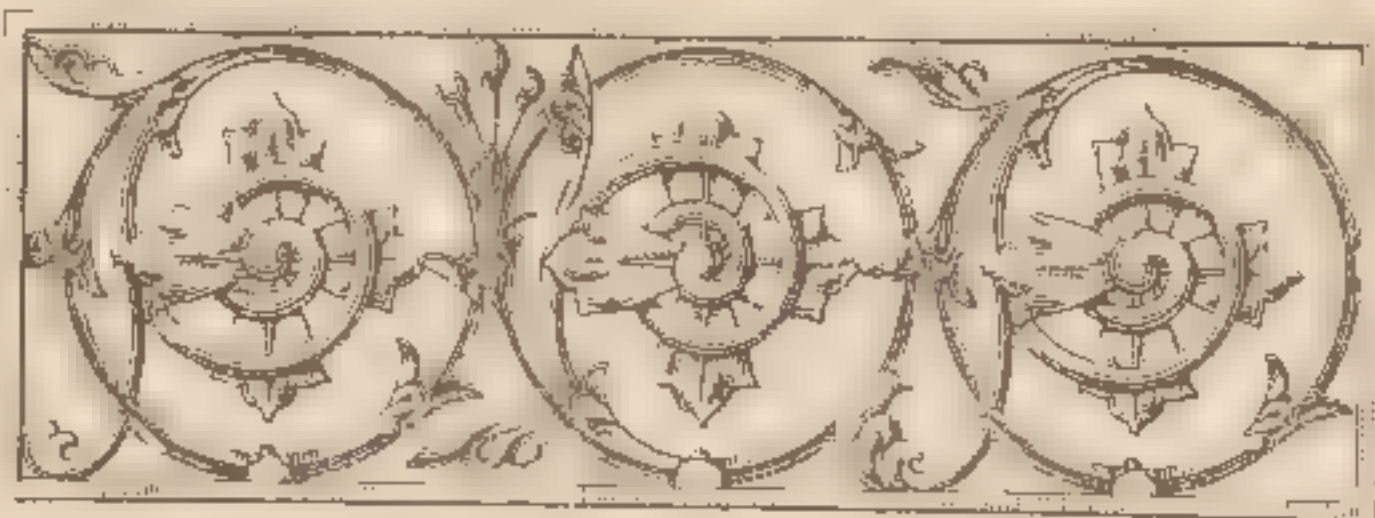
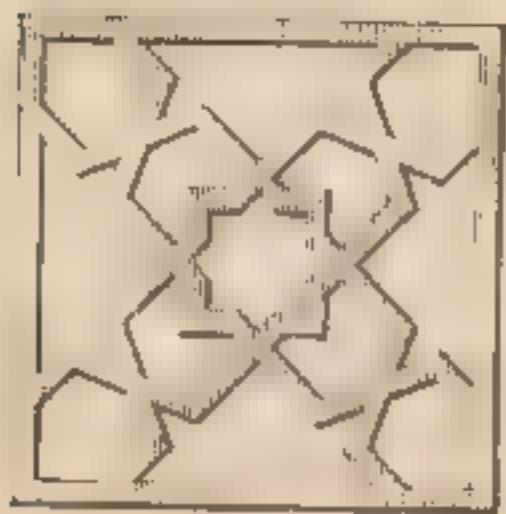
Nº 280



Nº 76

Nº 65

Nº 4

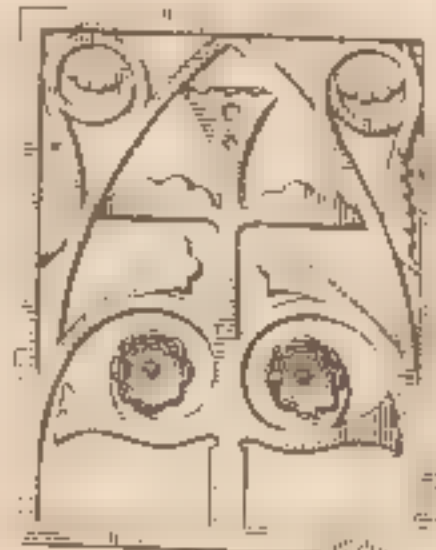


Nº 80

Nº 438

Nº 233

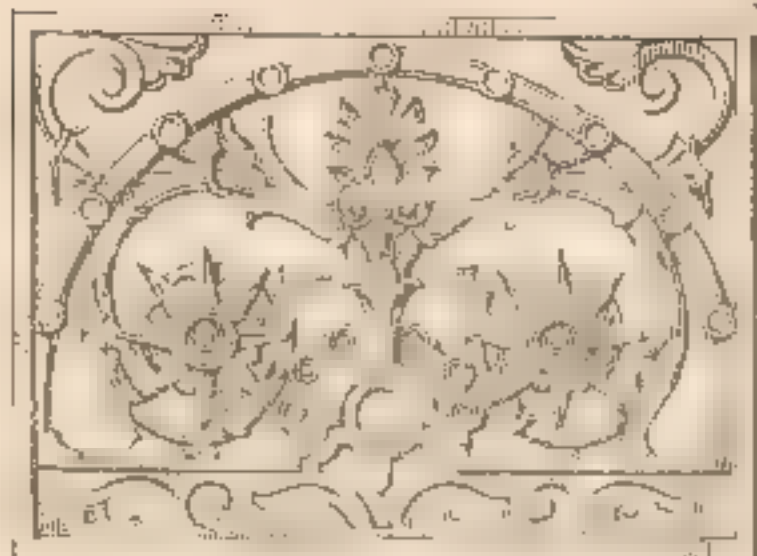
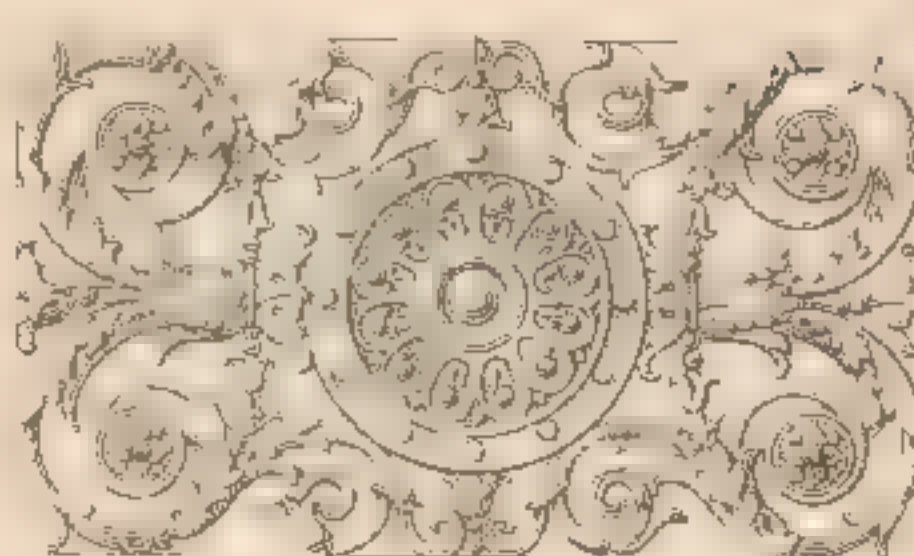
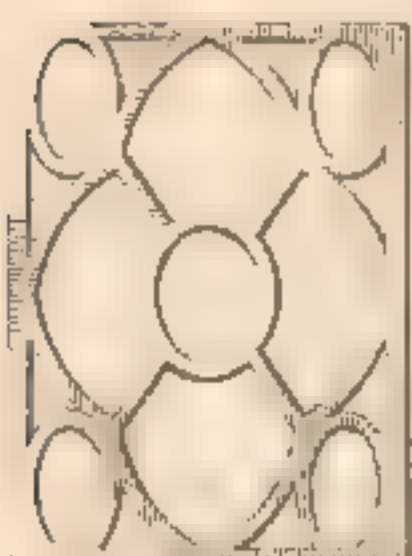
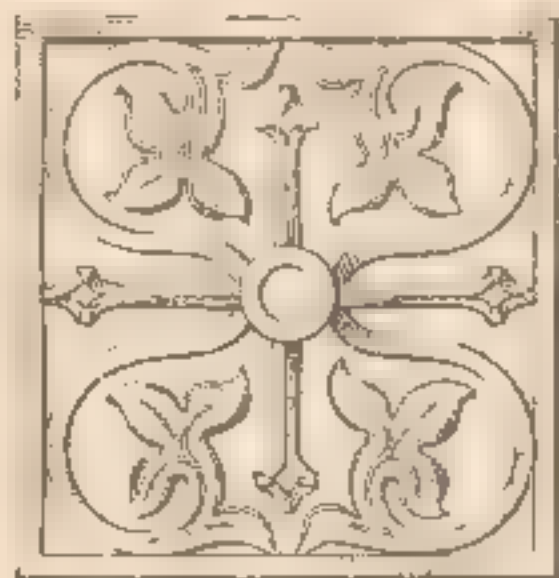
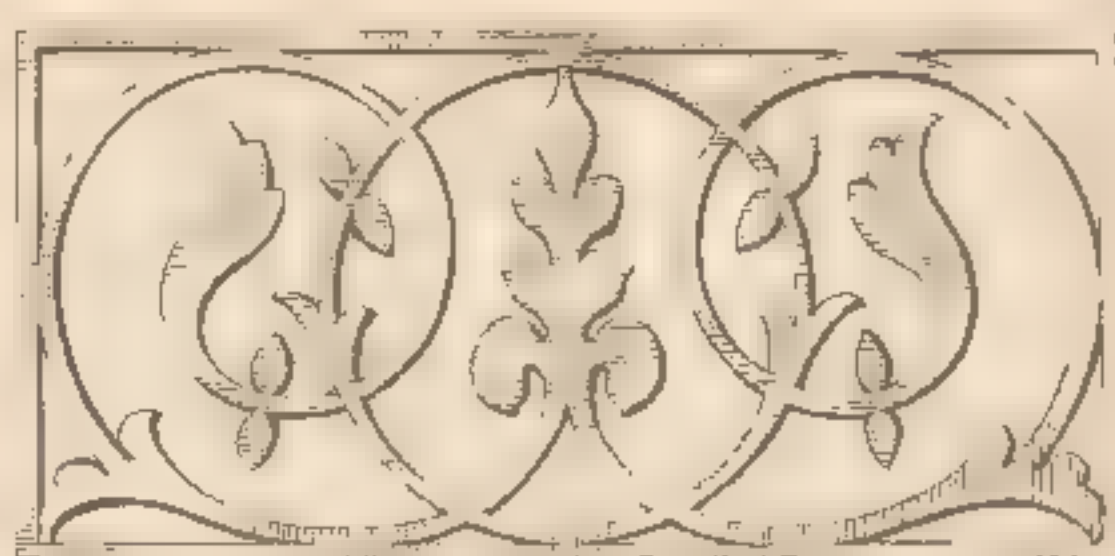
Nº 349



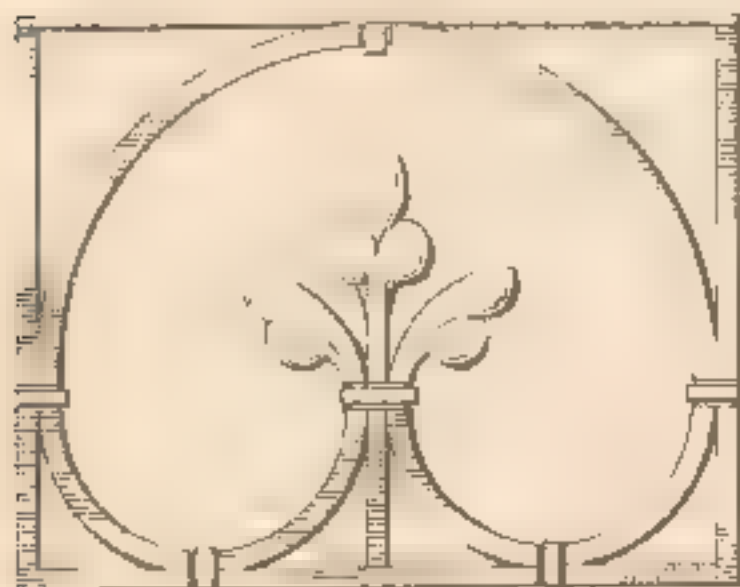
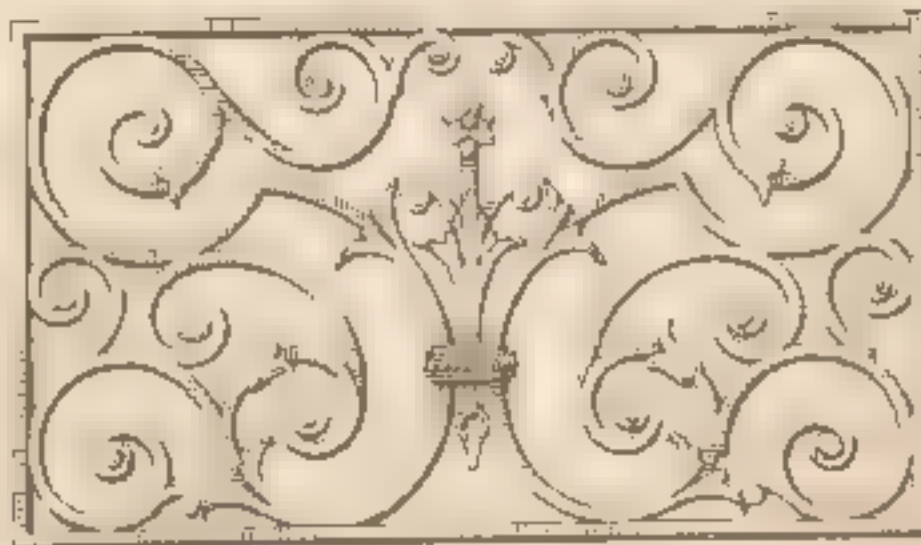
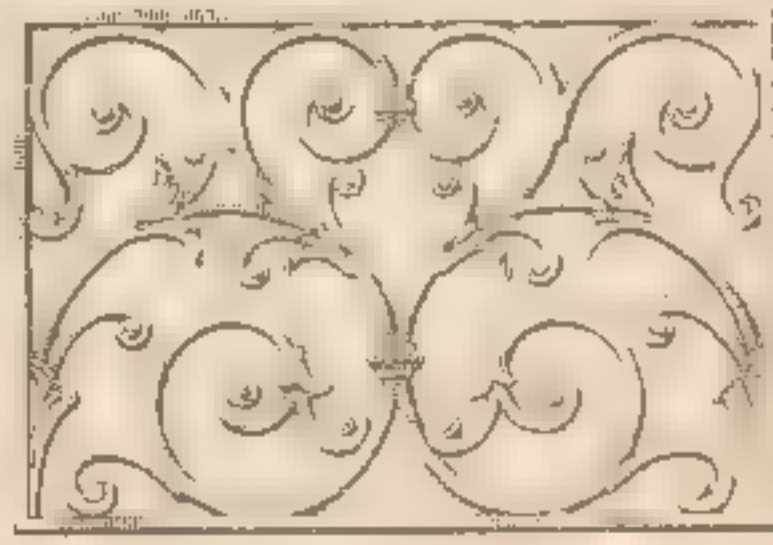
One face

SCALE 1 INCH = 1 FOOT

MACFARLANE'S PANELS

N^o 49N^o 68N^o 06N^o 336N^o 40N^o 6N^o 233

One face

N^o 244N^o 440N^o 458N^o 26N^o 26N^o 26N^o 26N^o 26N^o 26

SCALE 1 INCH =

MACFARLANE'S PANELS

Nº 26



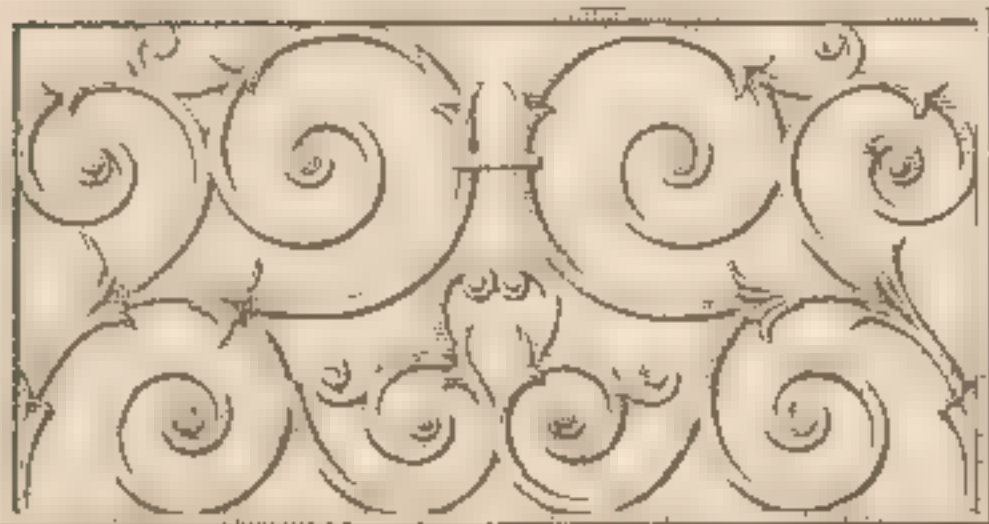
Nº 26



Nº 26



N 26



Nº 26



Nº 26



N 26



Nº 26



1º 26



N 26



SCALE 1 INCH = 1 FOOT

MACAPLAN FA.F.L.

Nº 26



6 1/2

Nº 26



5 1/4

Nº 456



5 1/4

Nº 326



Nº 33



One face

Nº 347

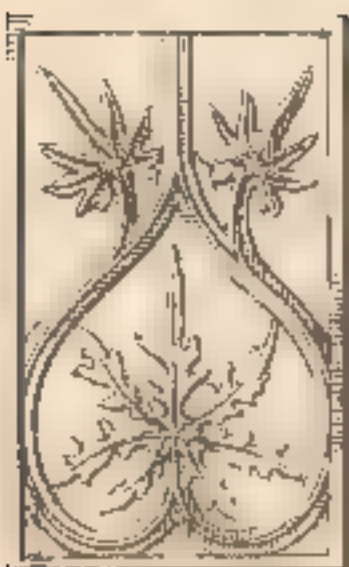


One face

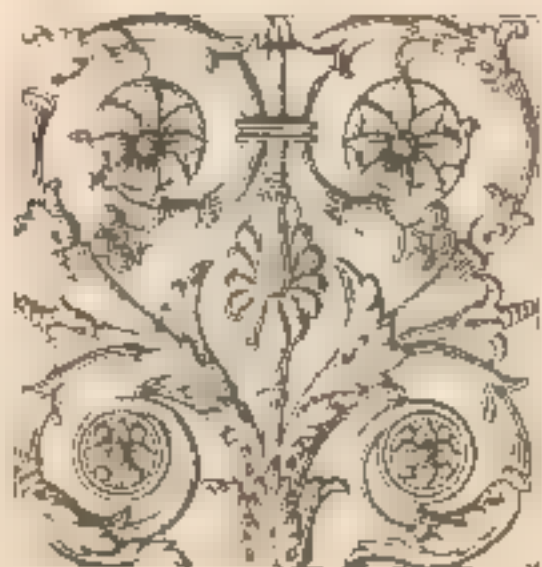
Nº 126



Nº 6

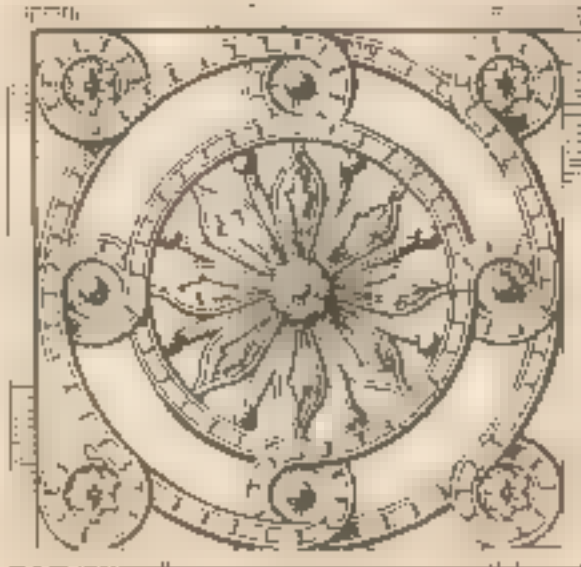


Nº 06



5 1/4

Nº 53

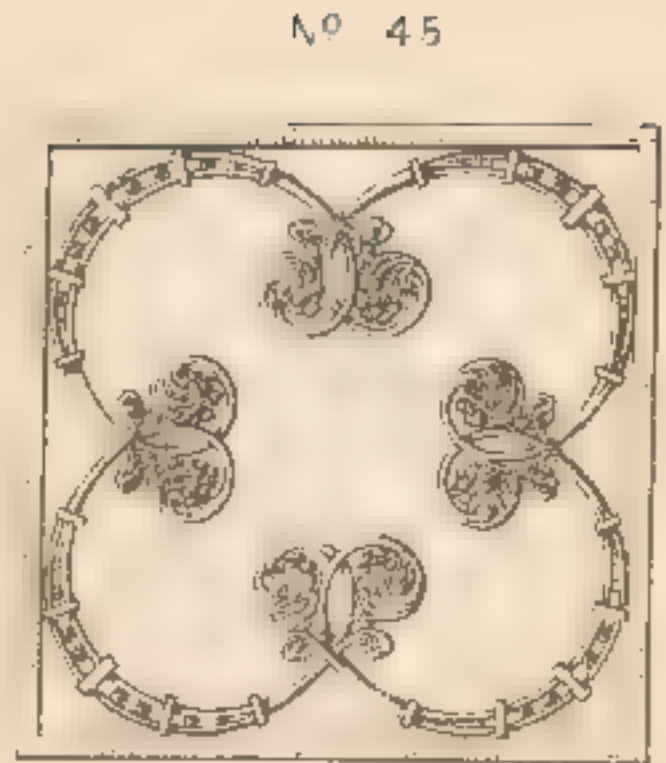
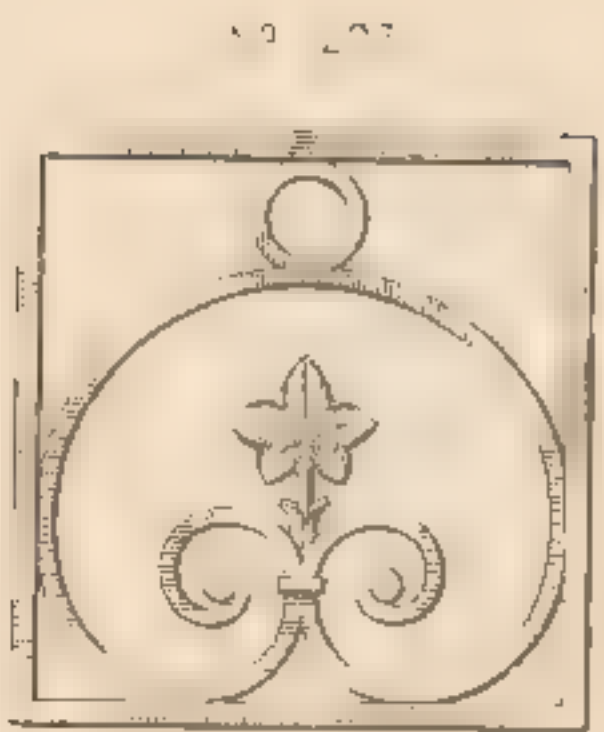


Nº 38

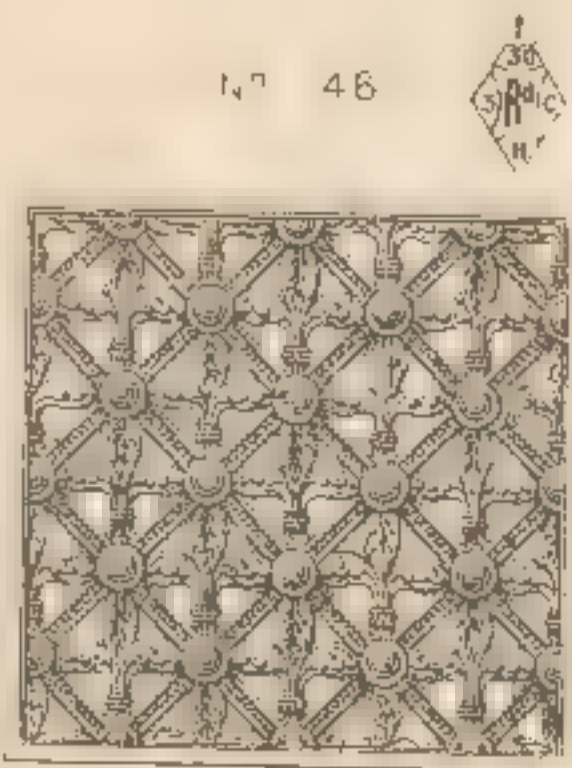
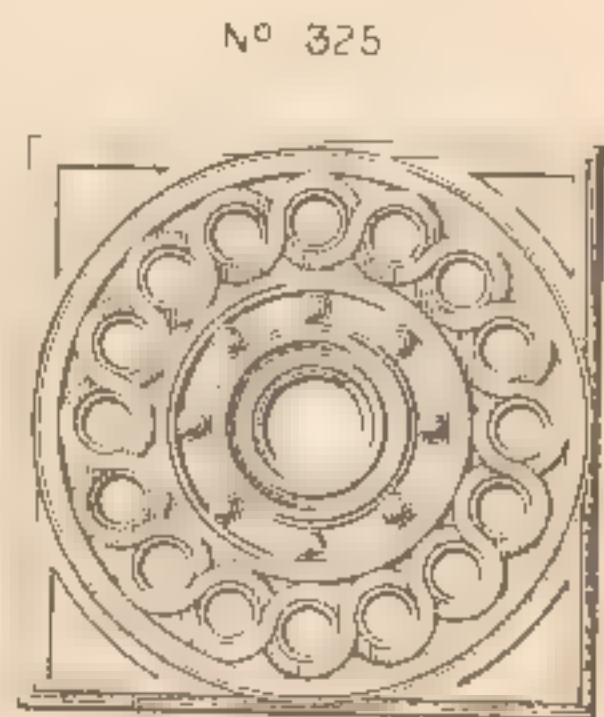
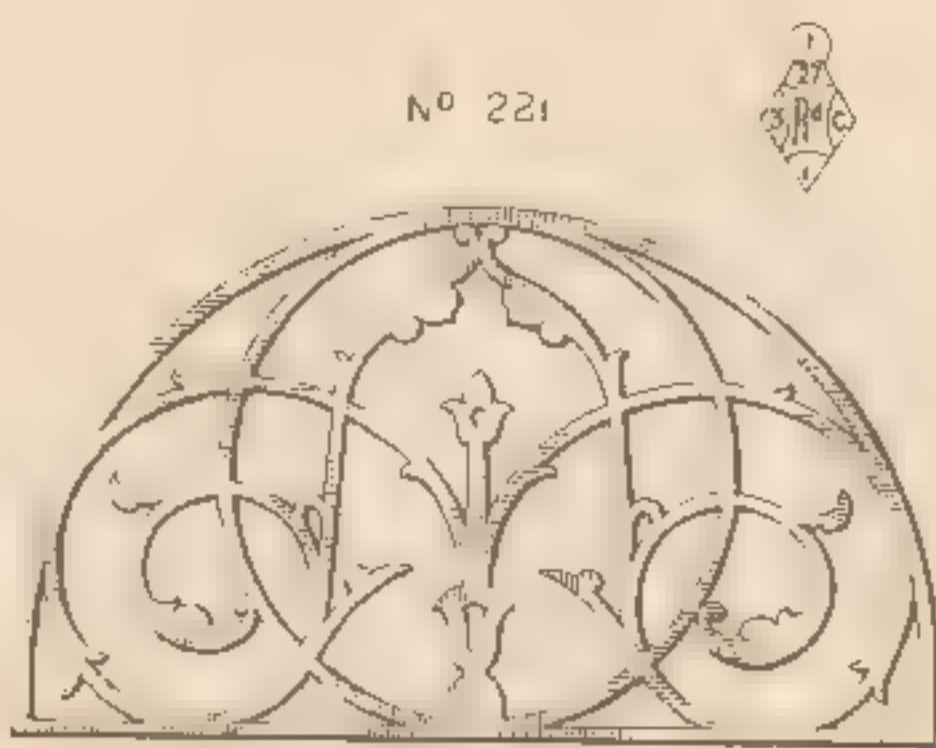
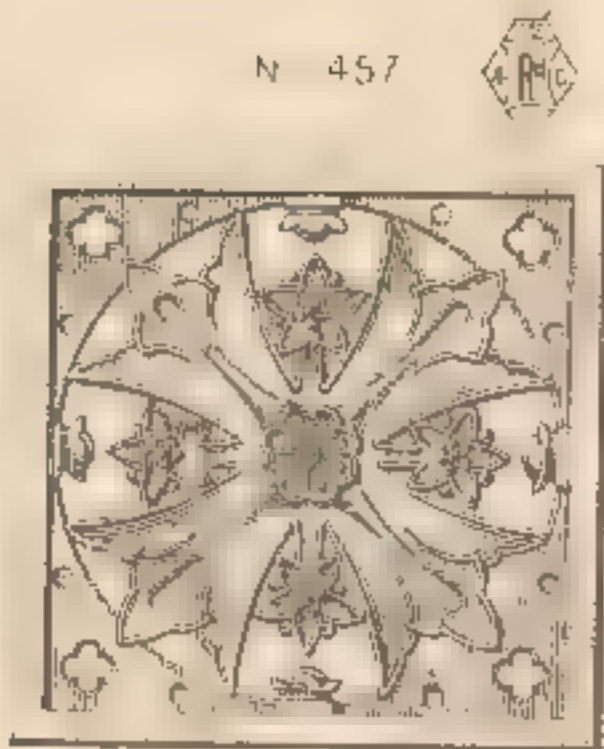


S.A.L. NCH - FOCT

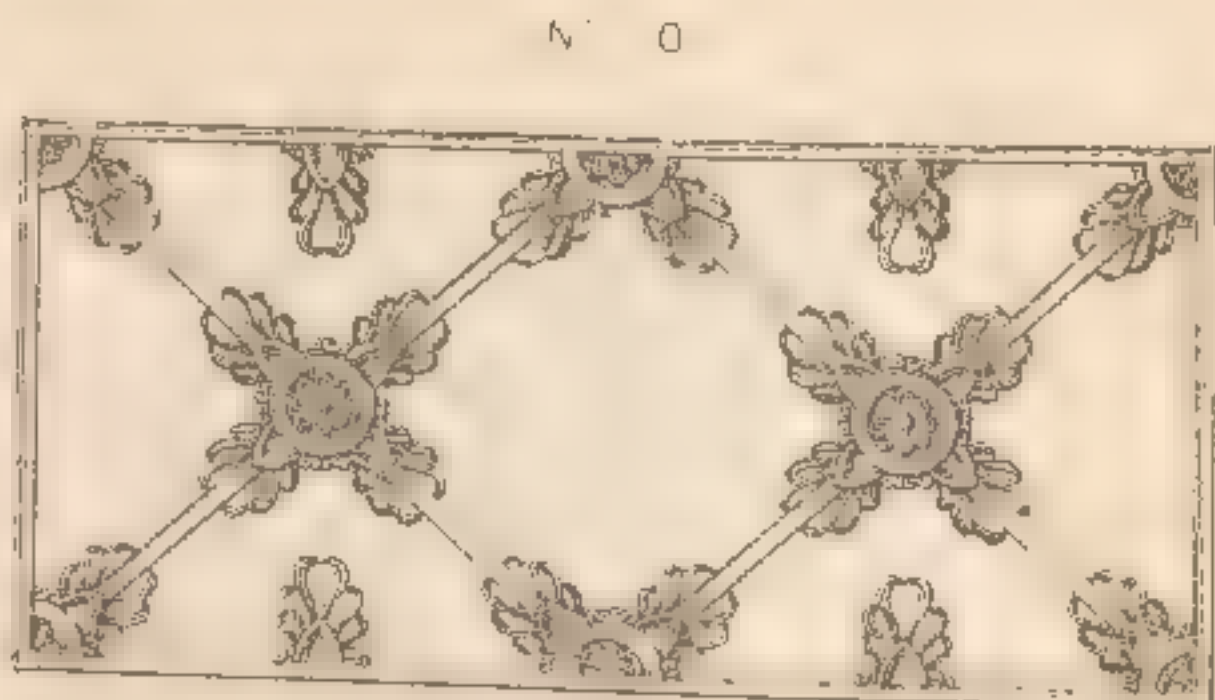
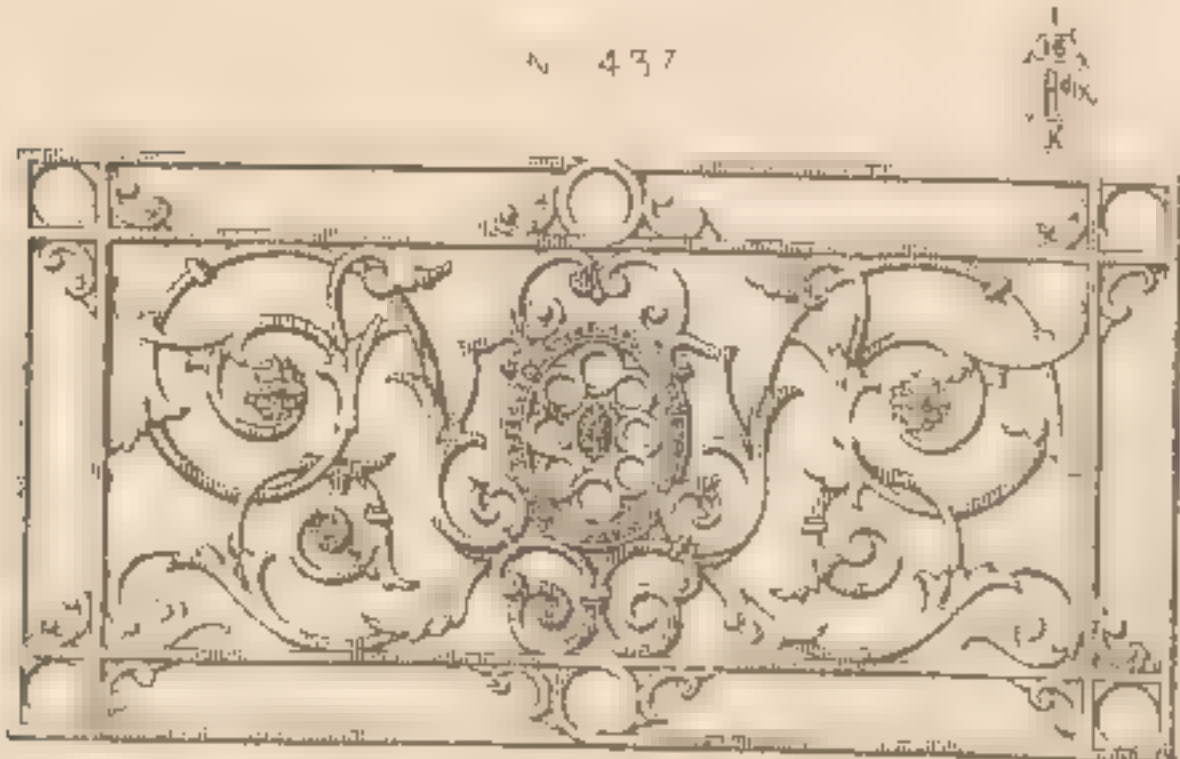
MACFARLANE'S PANELS



One face

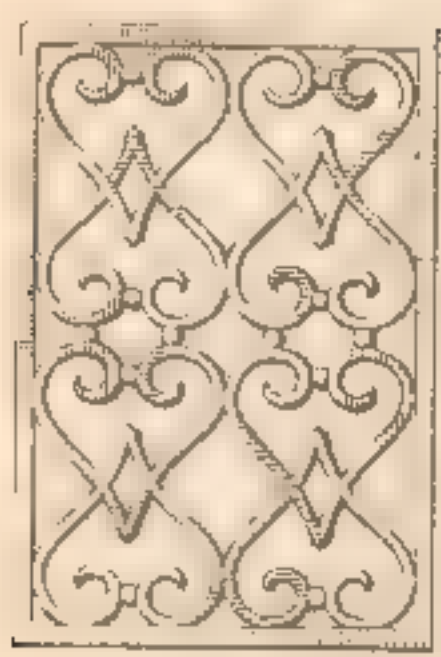


One face



MACFARLANE'S PANELS

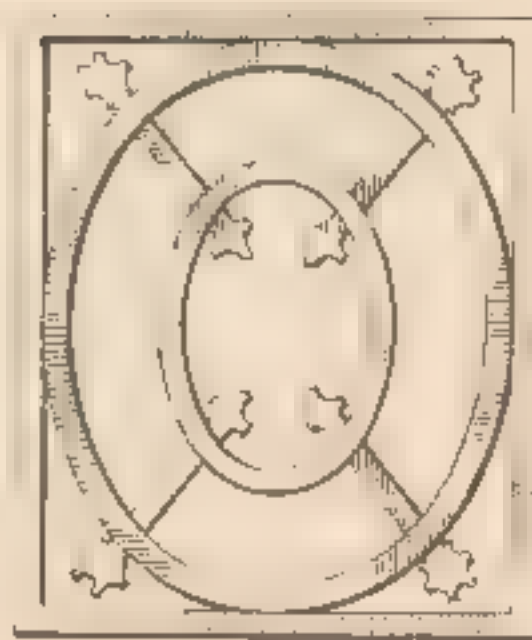
Nº 294



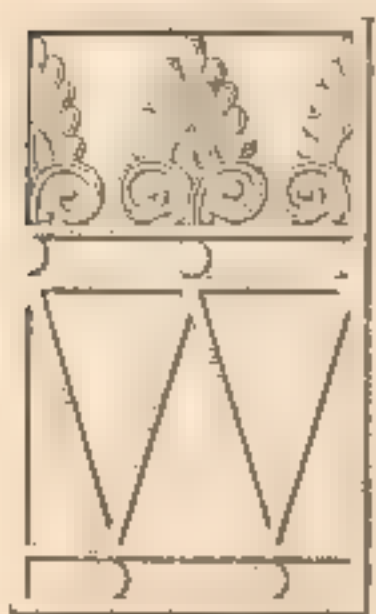
Nº 437



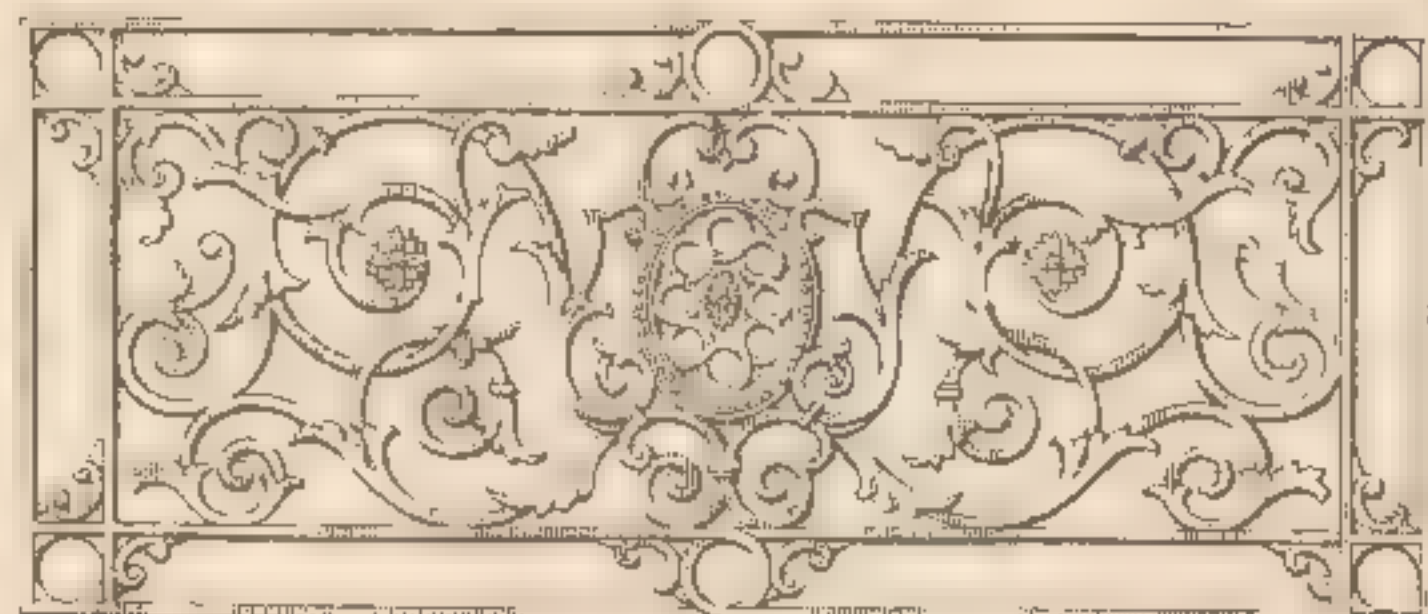
Nº 47



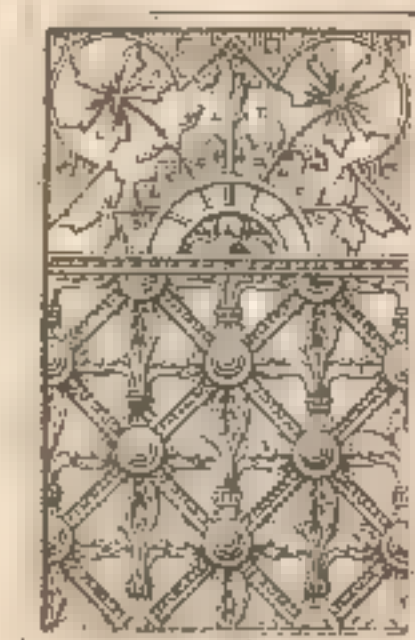
N 245



N 437

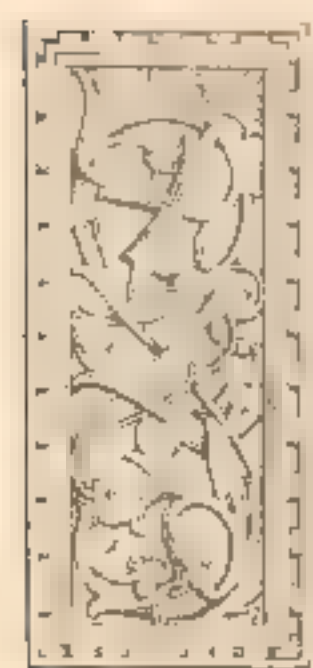


Nº 34



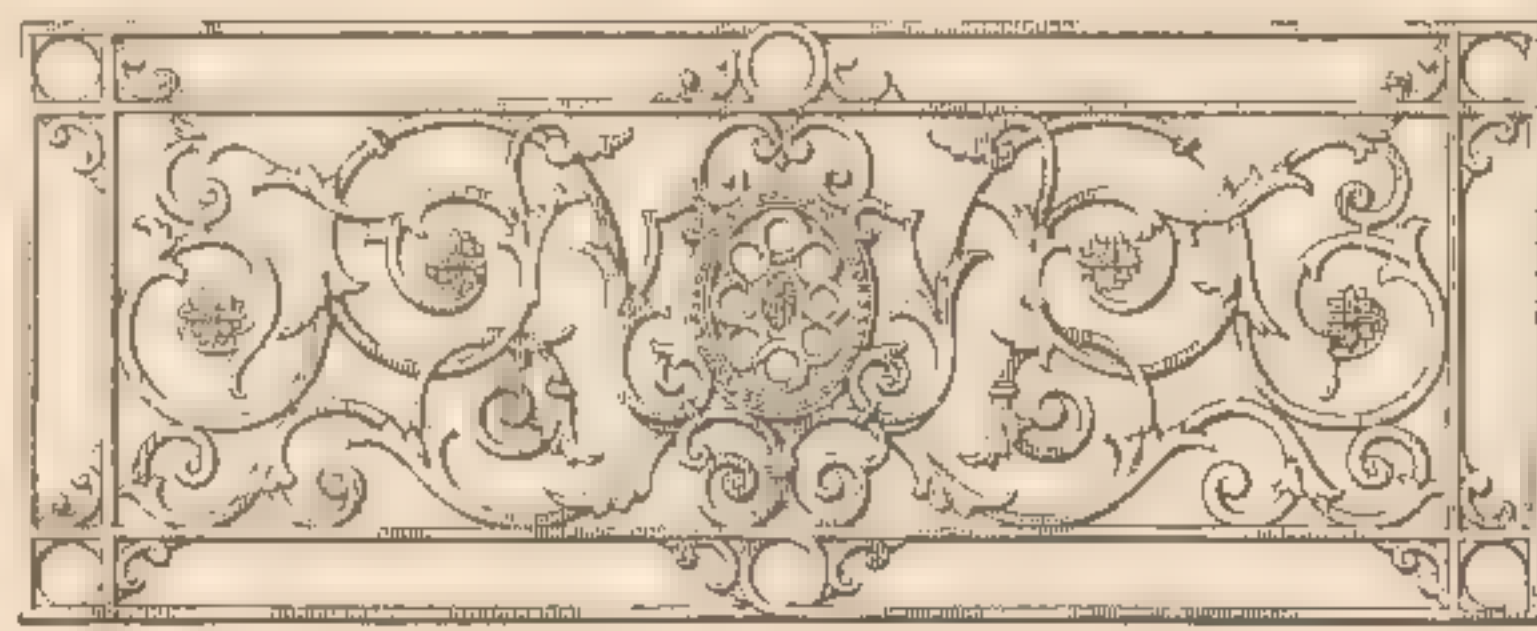
One face.

Nº 133



border one face

Nº 437.

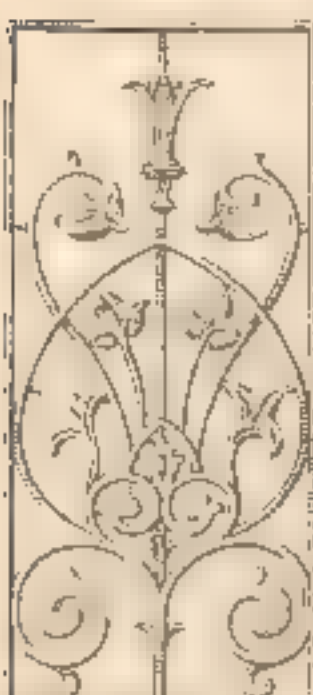


Nº 30



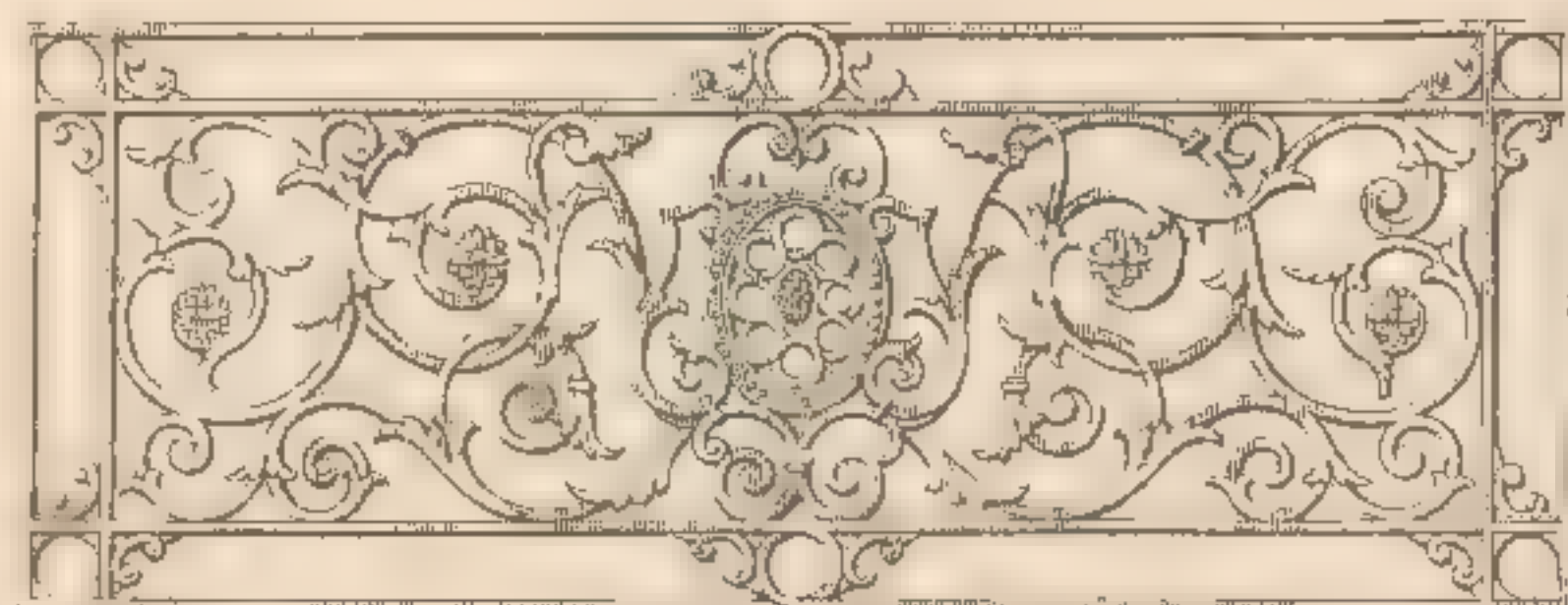
One face.

Nº 23

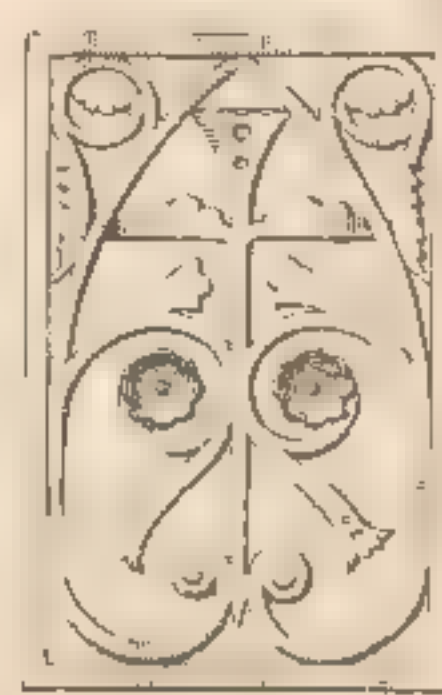


O 4

Nº 437

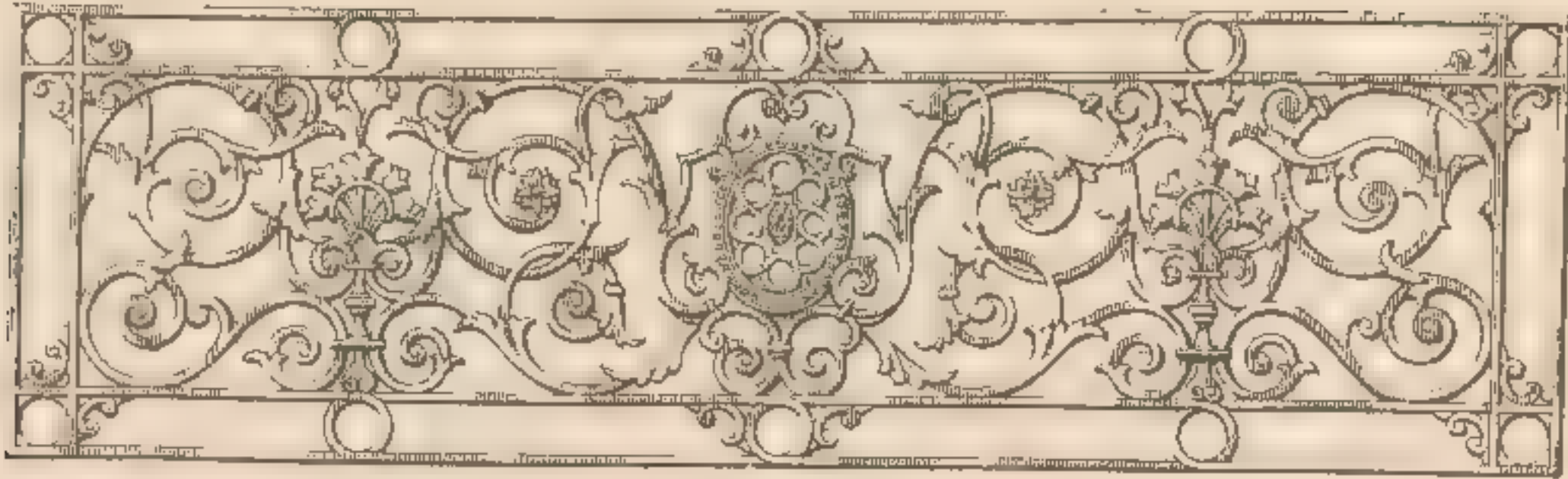


Nº 17c



MACFARLANE'S PANELS

Nº 437.



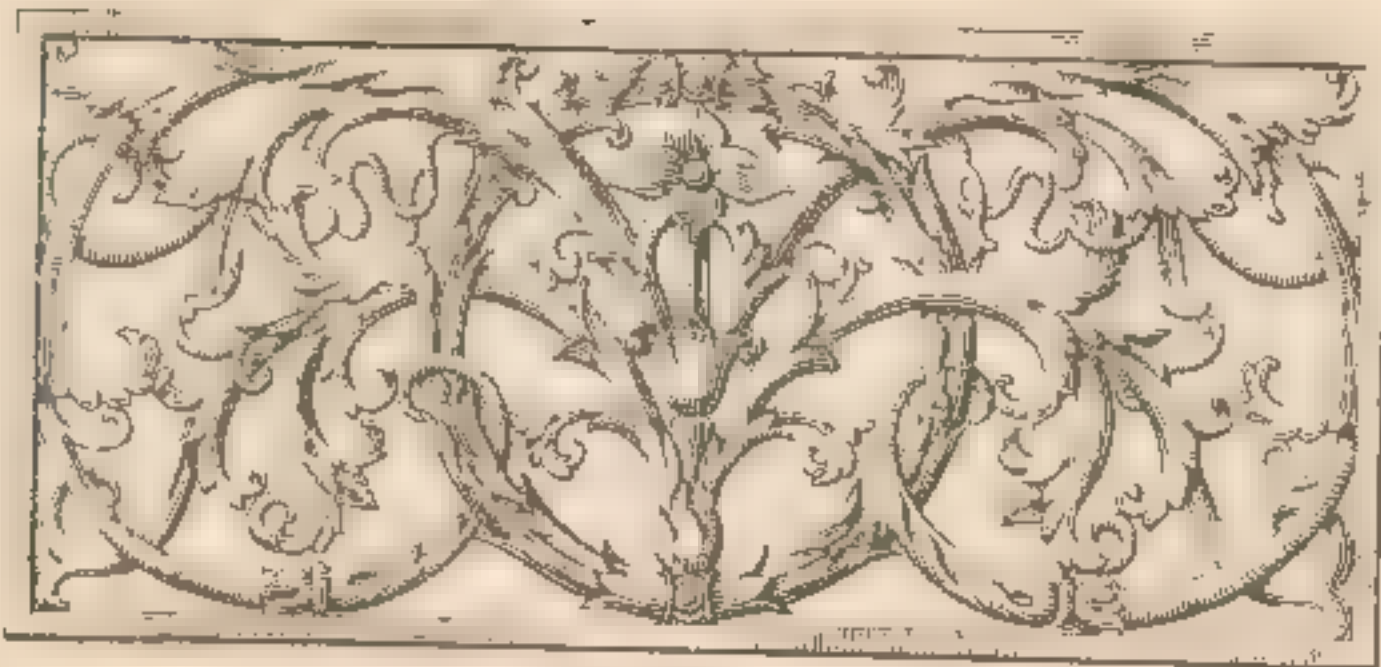
5 3.

Nº 33



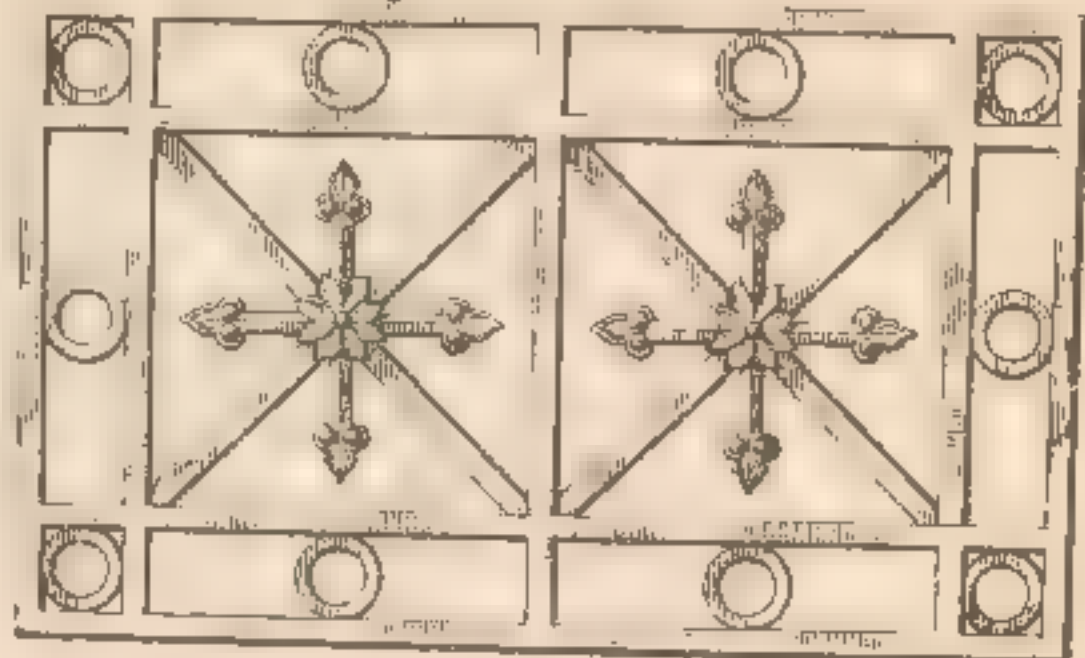
t 4

Nº 35



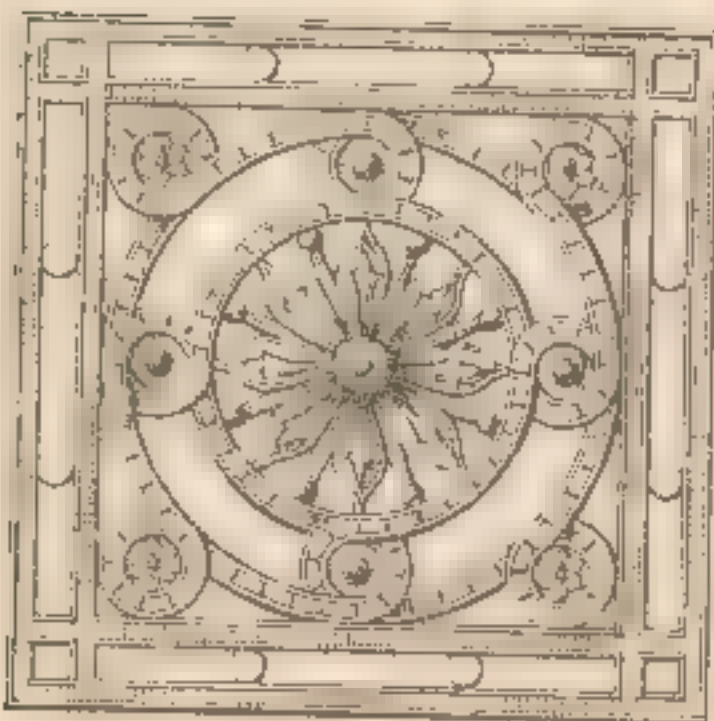
9 2

Nº 24



L 12

Nº 53



2 7

Nº 78



3 4

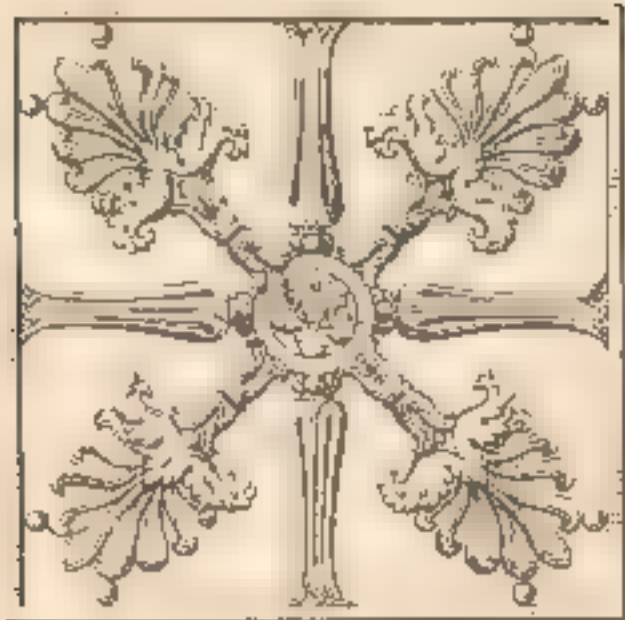
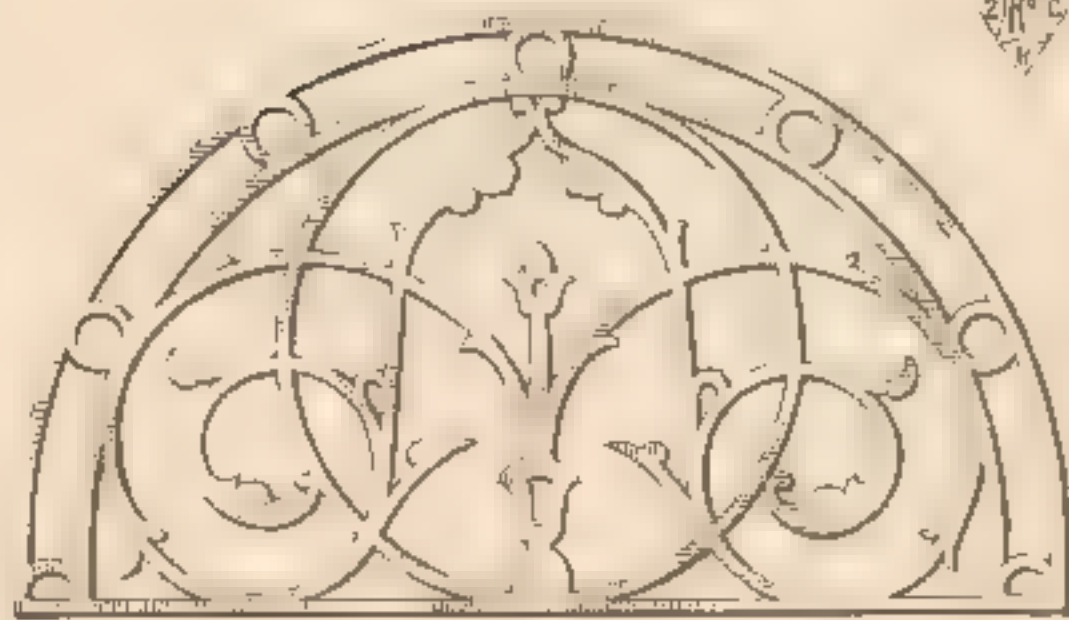
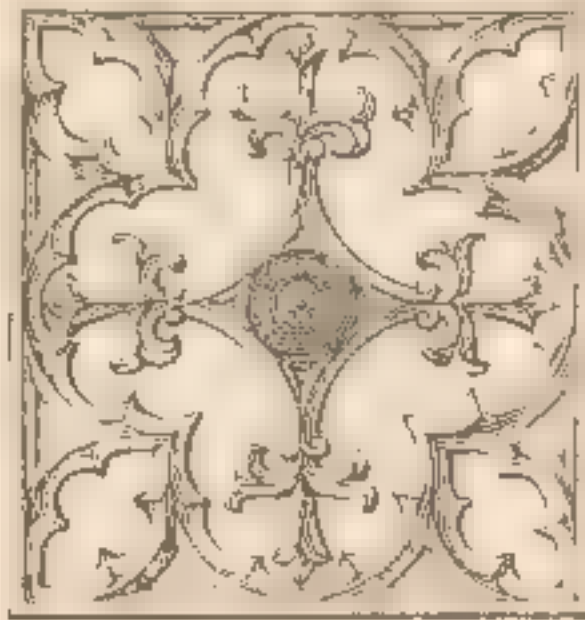
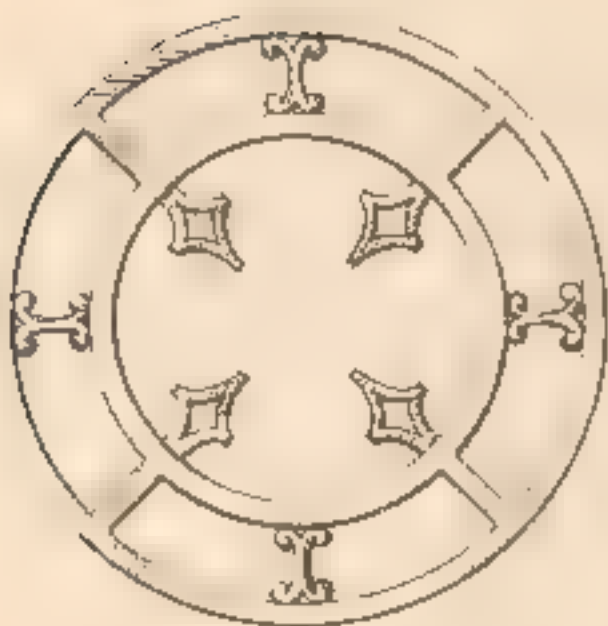
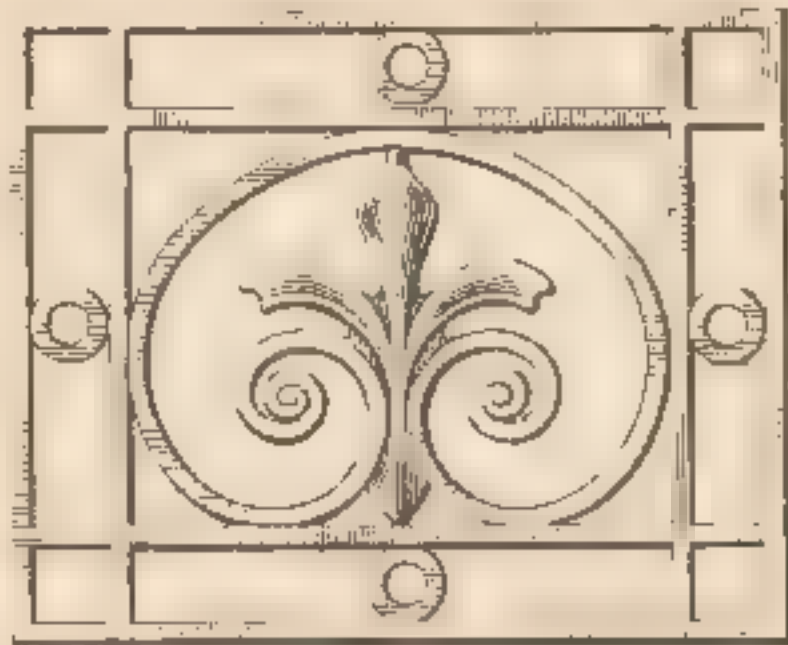
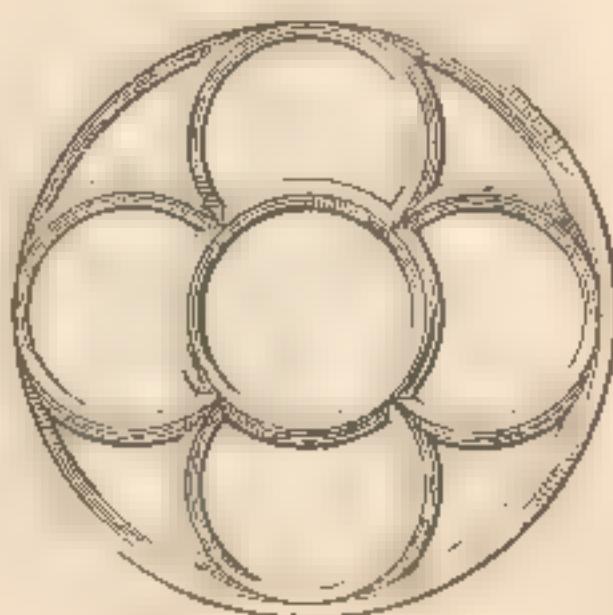
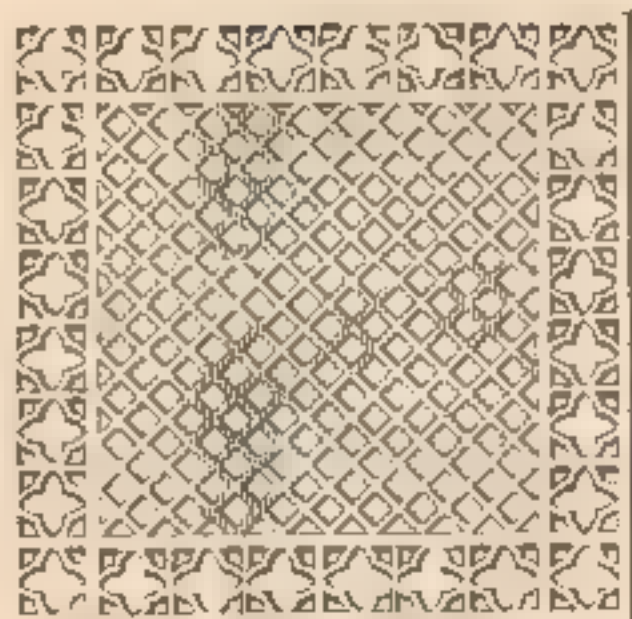
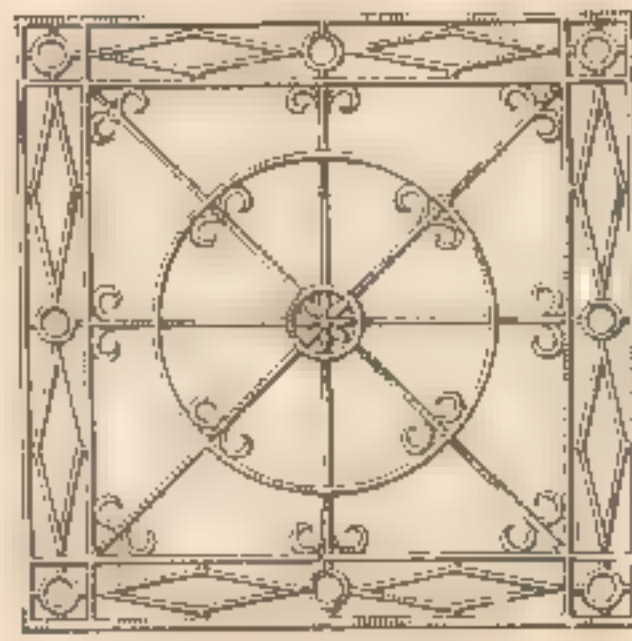
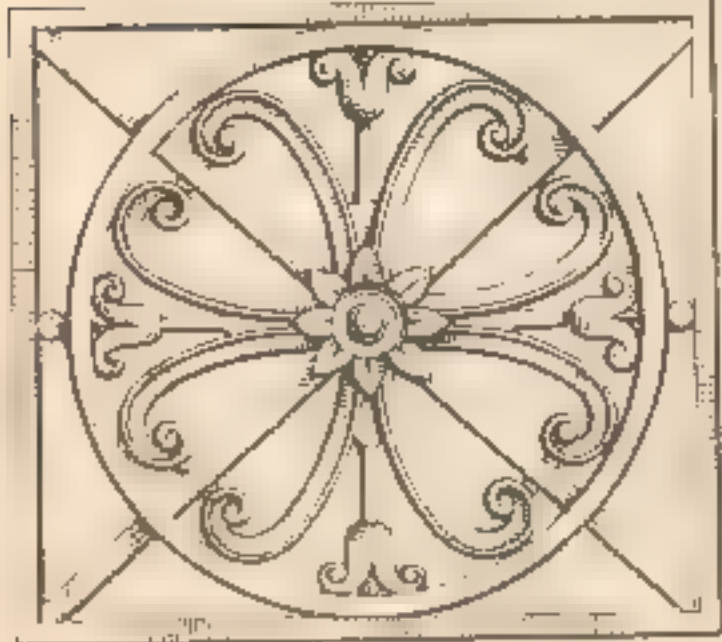
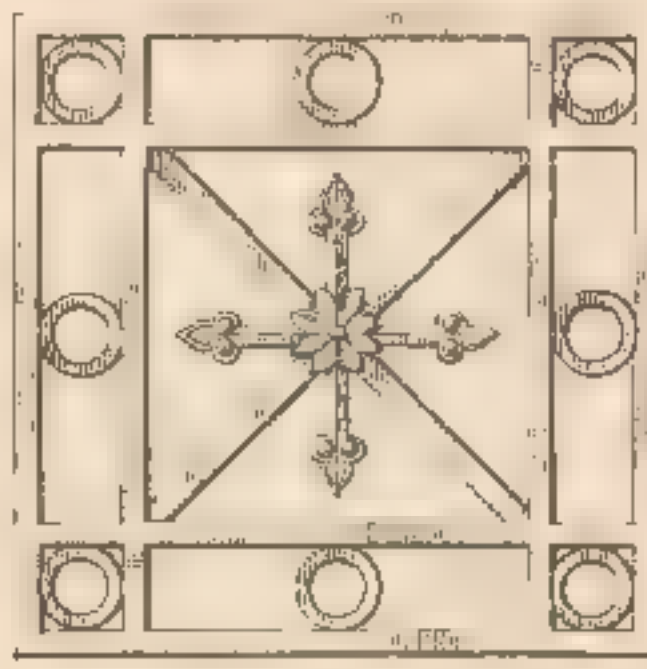
Nº 36



2 0

SCALE 1 INCH = 1 FOOT

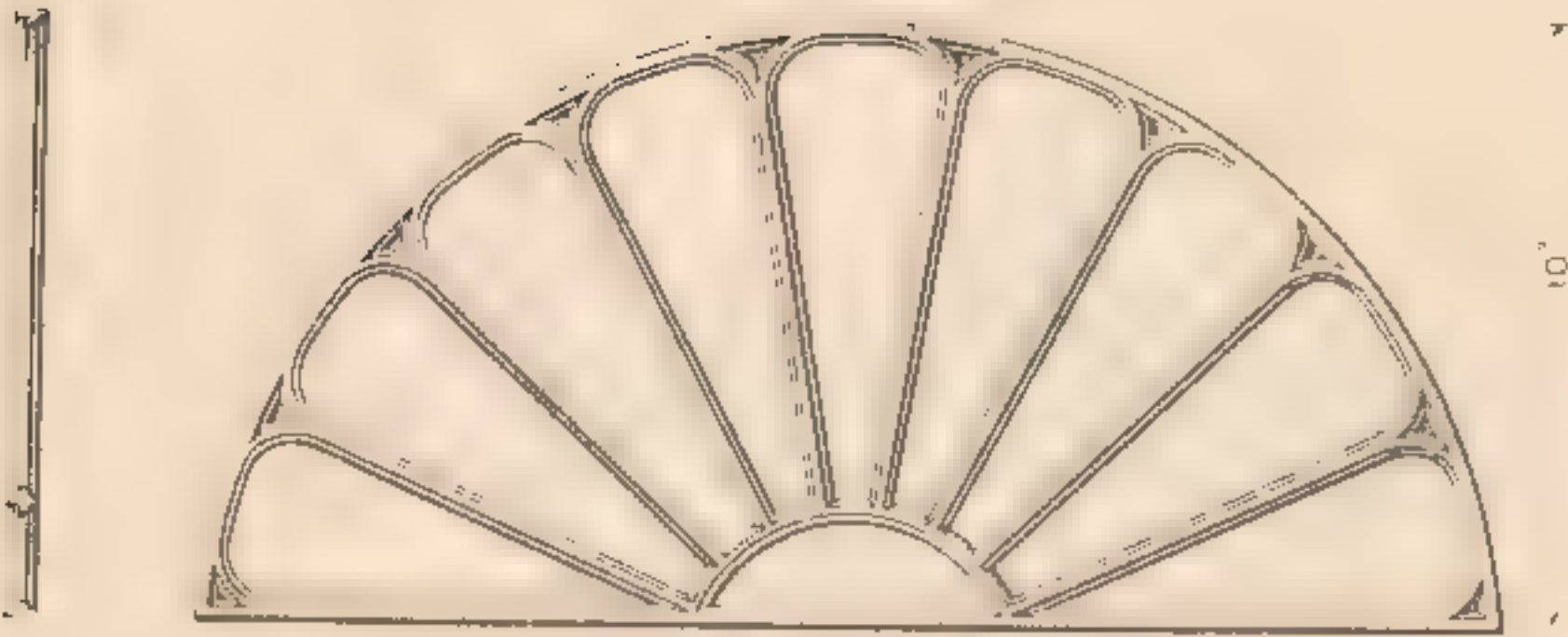
MACFARLANE'S PANELS

N^o 34N^o 22N^o 1N^o 42N^o 148N^o 49N^o 389N^o 66N^o 1N^o 32N^o 6N^o 24

SCALE INCH - FOOT

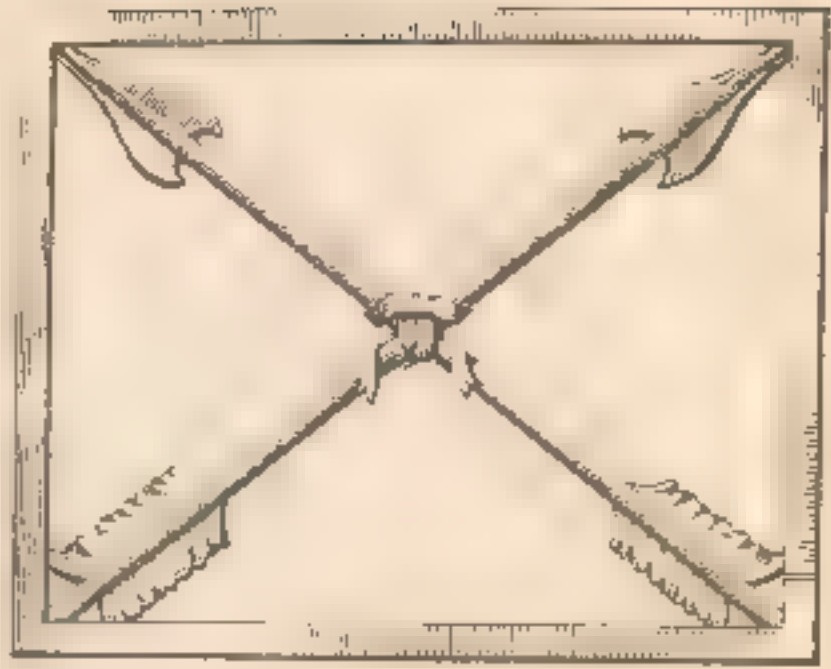
MACFARLANE'S PANELS

Nº 771



Glass can be filed in if necessary.

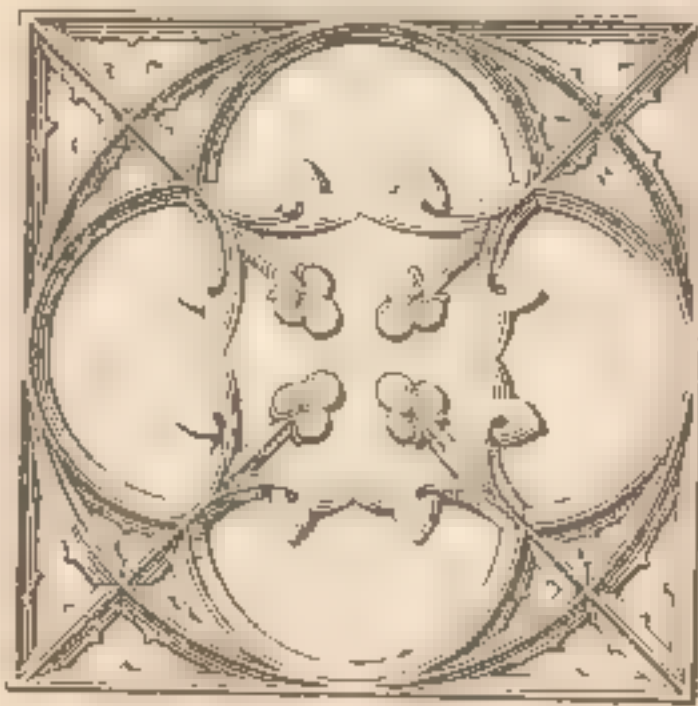
Nº 407



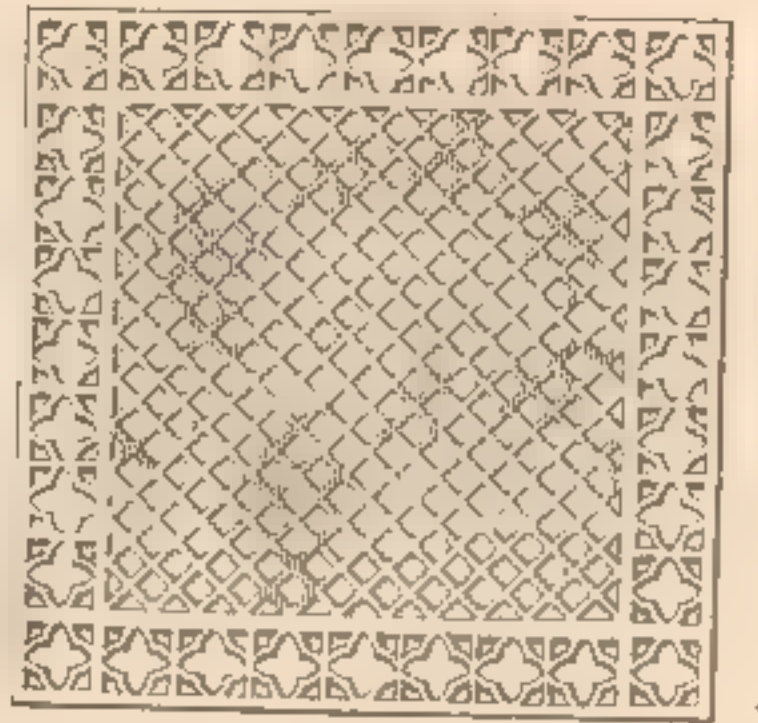
Nº 20



Nº 23



Nº 389



Nº 772



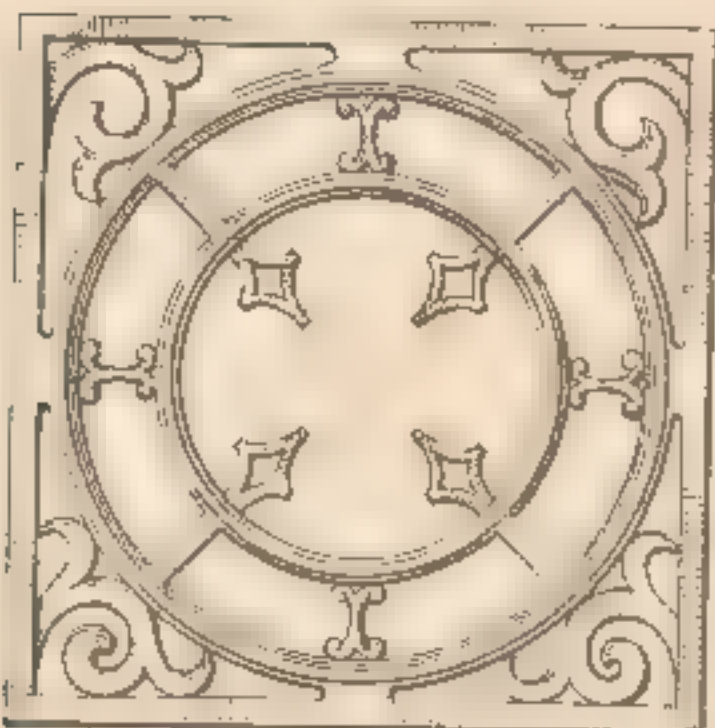
Nº 16



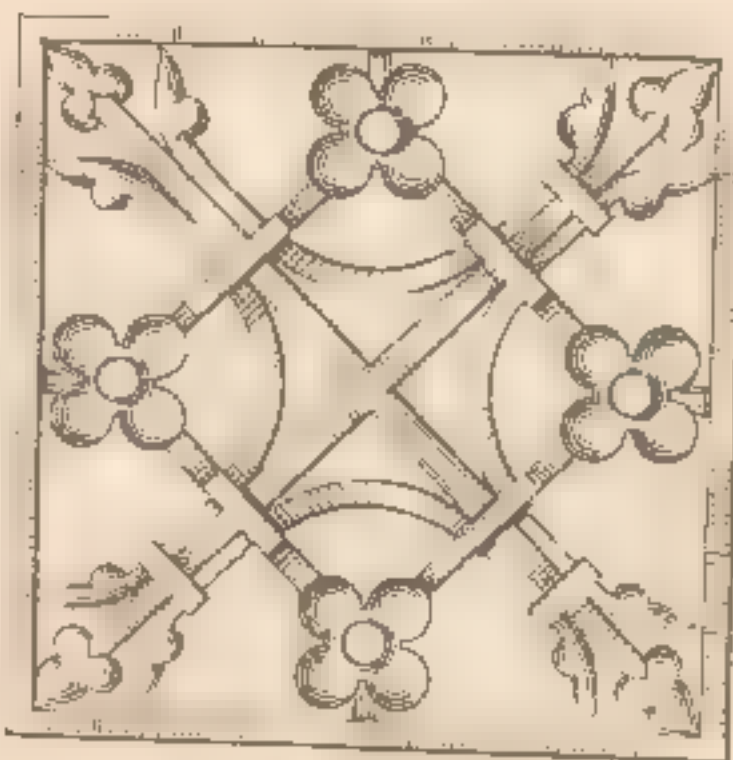
Nº 77



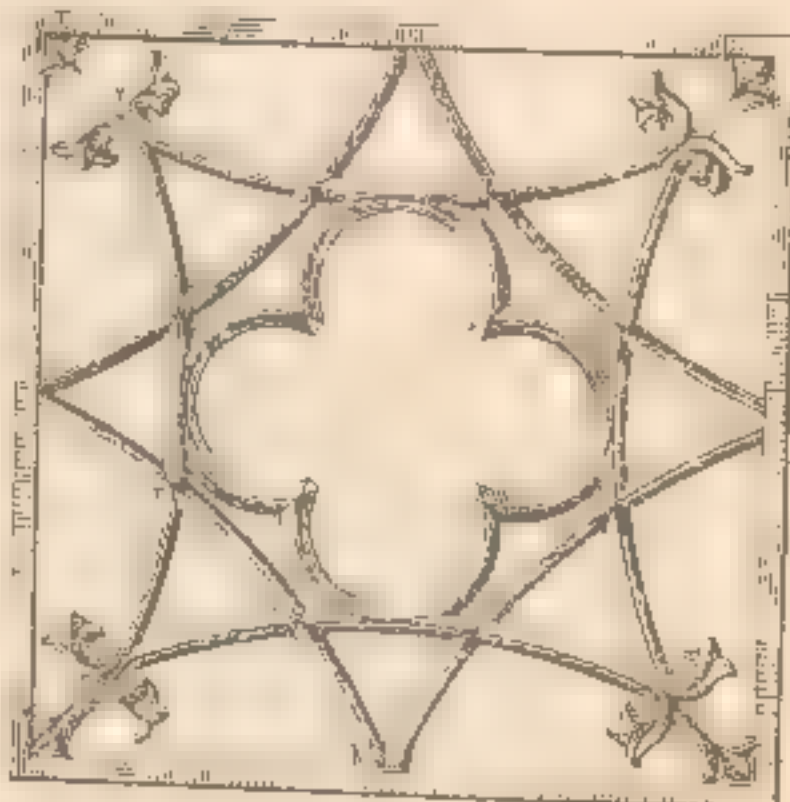
Nº 42



Nº 460



Nº 138

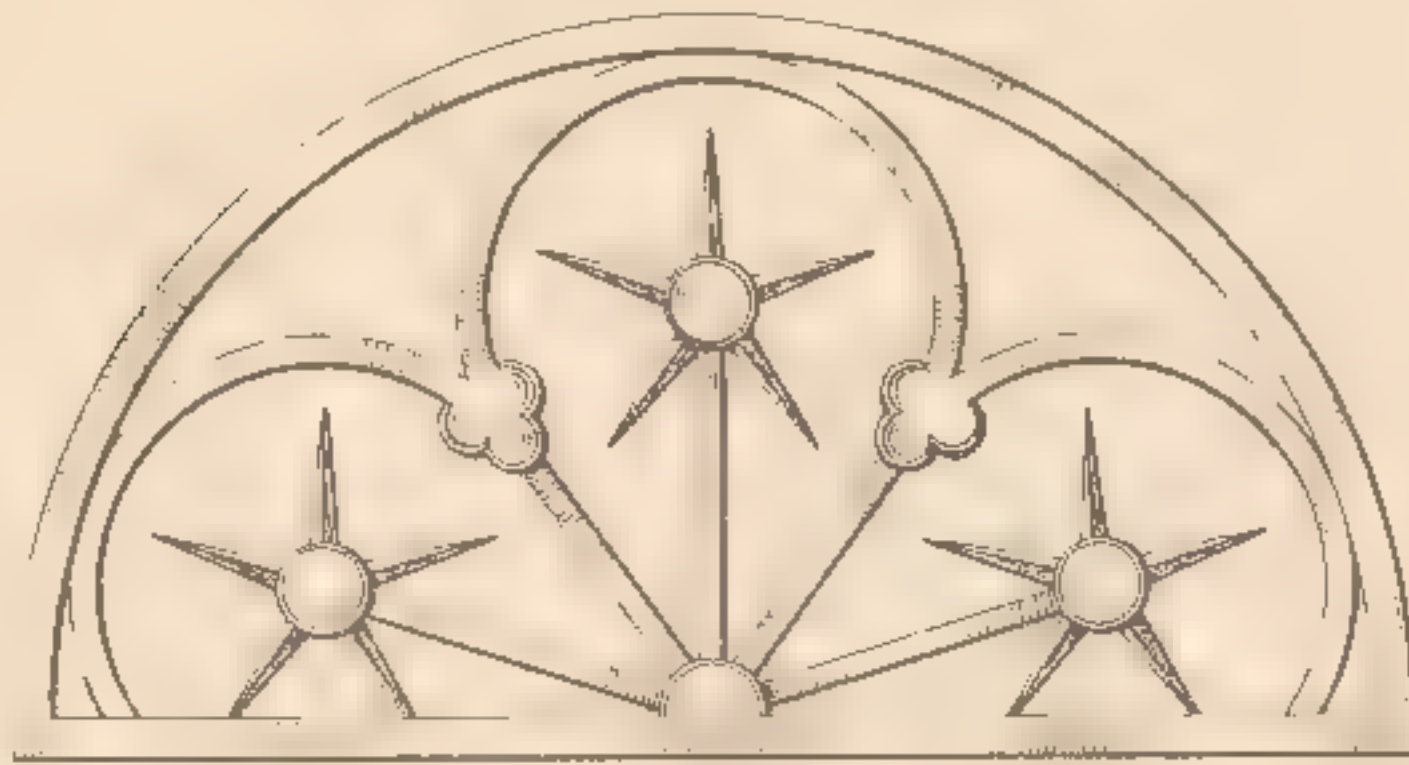
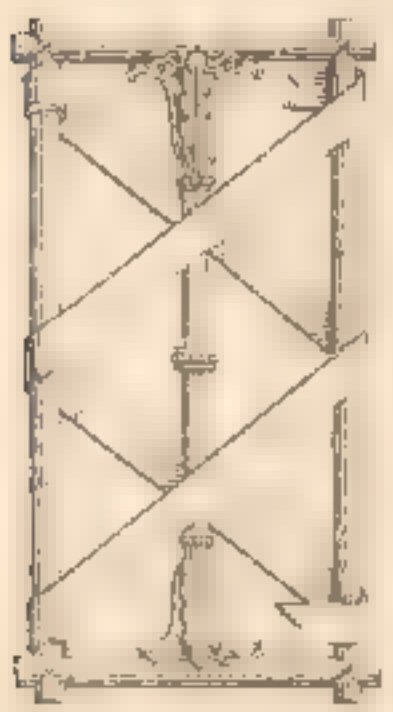


SCALE - 1 FOOT

MACFARLANE'S PANELS

Nº 216

Nº 65

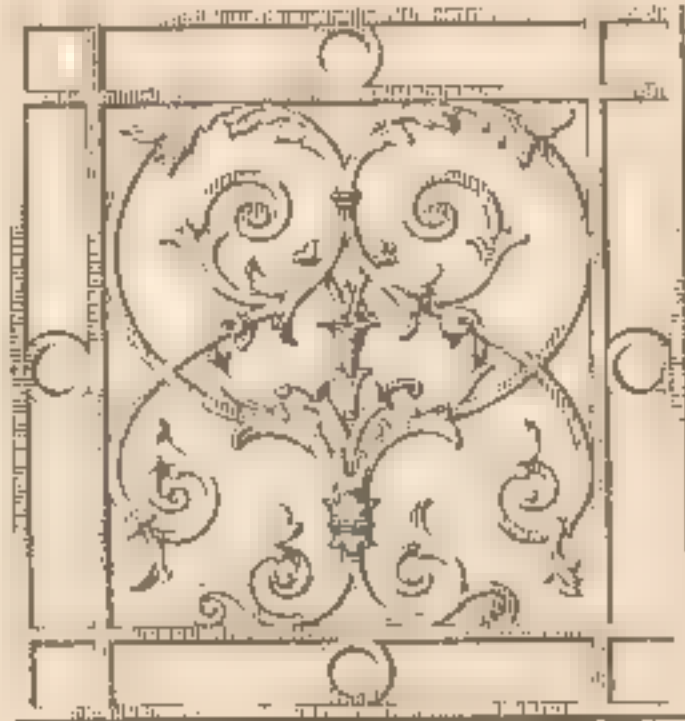
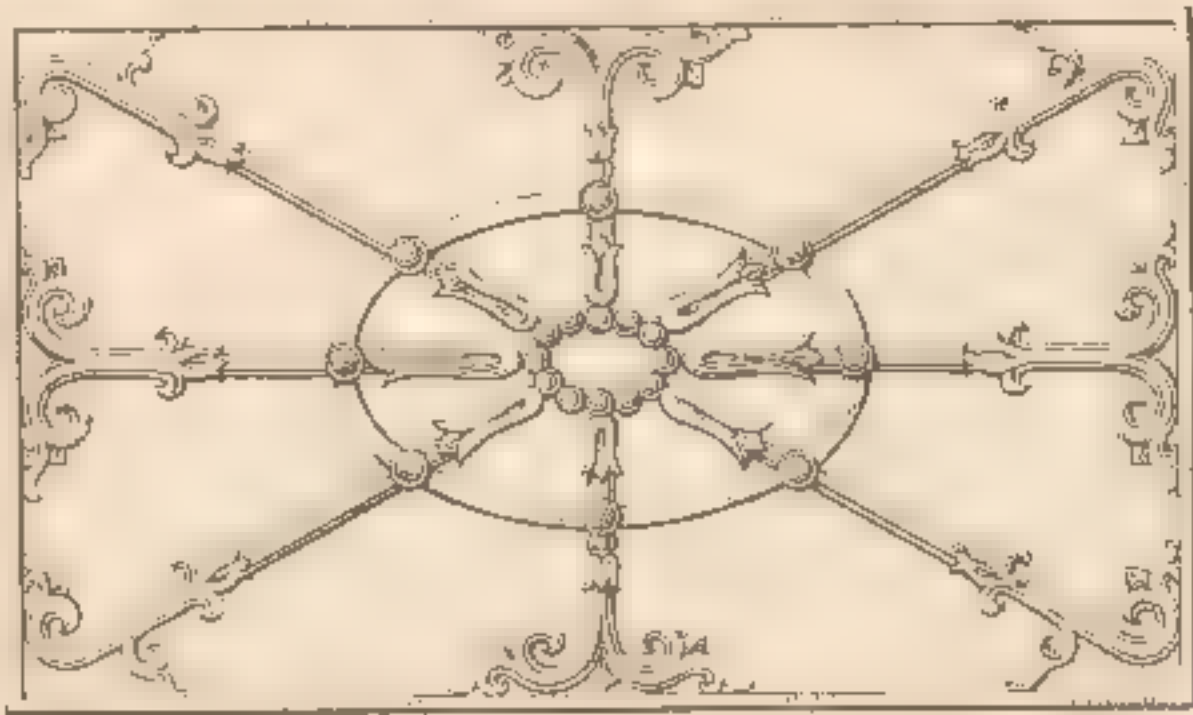
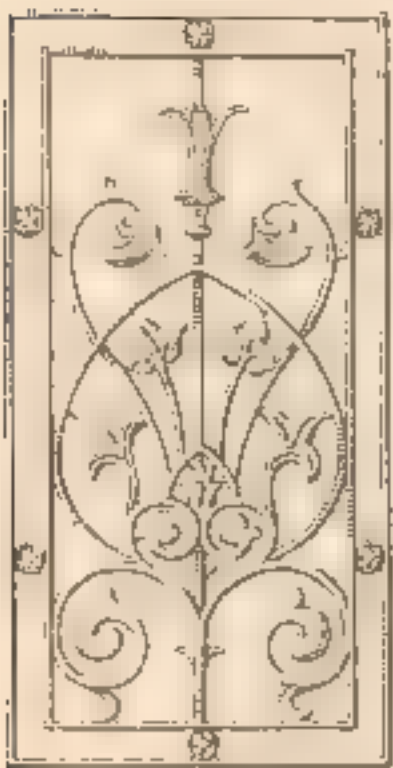


4 0"

Nº 25

Nº 33

Nº 47b

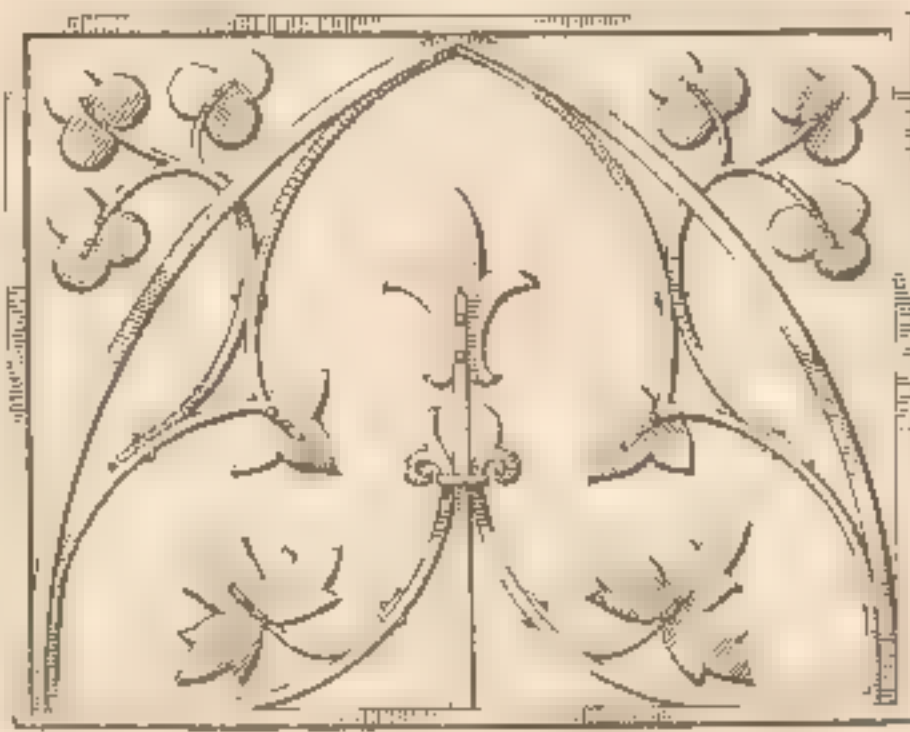


3 5"

Nº 280

Nº 57

Nº 60

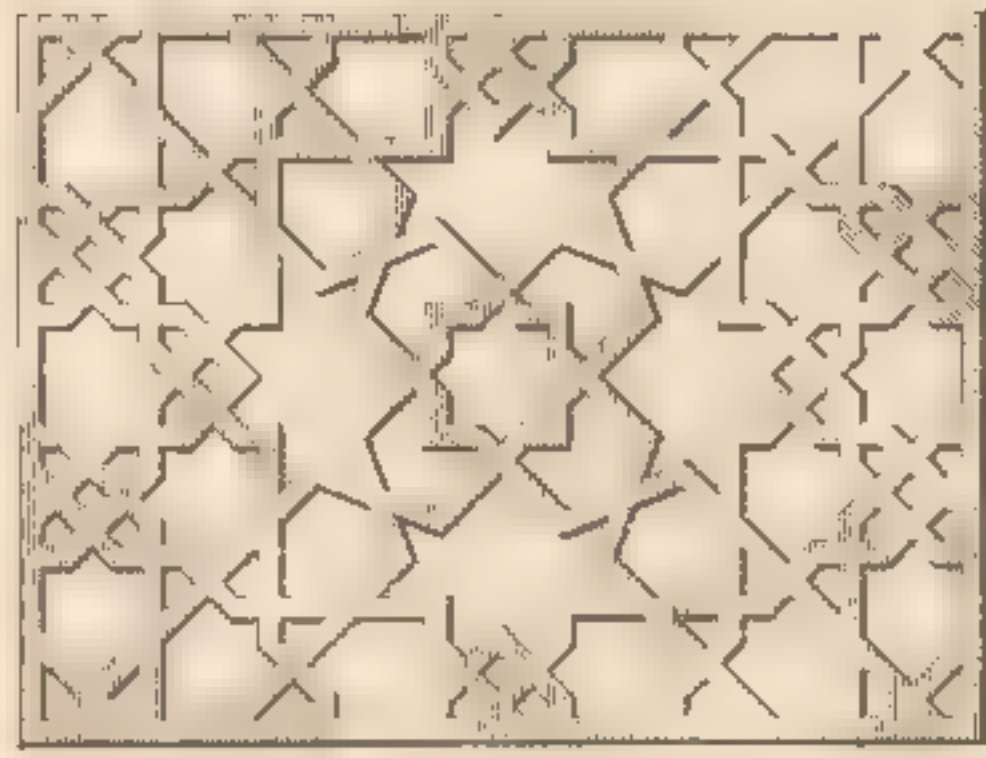
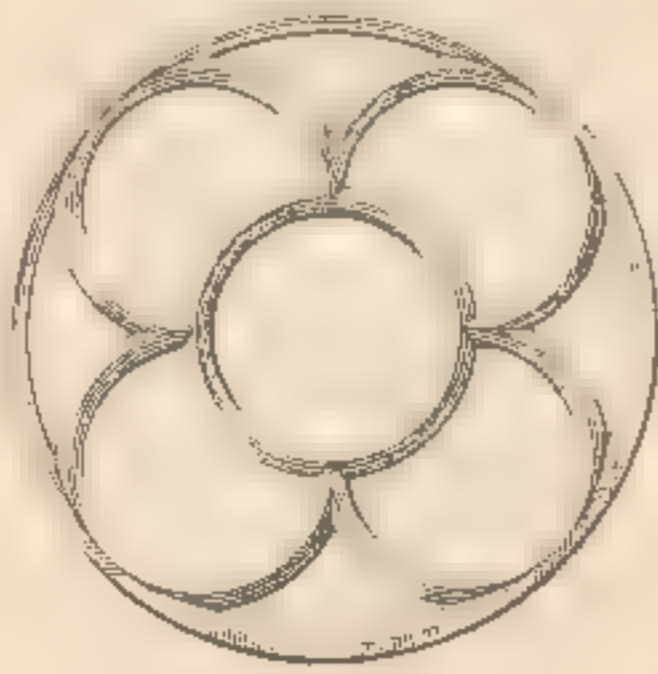


2 0"

Nº 68

Nº 79

Nº 776



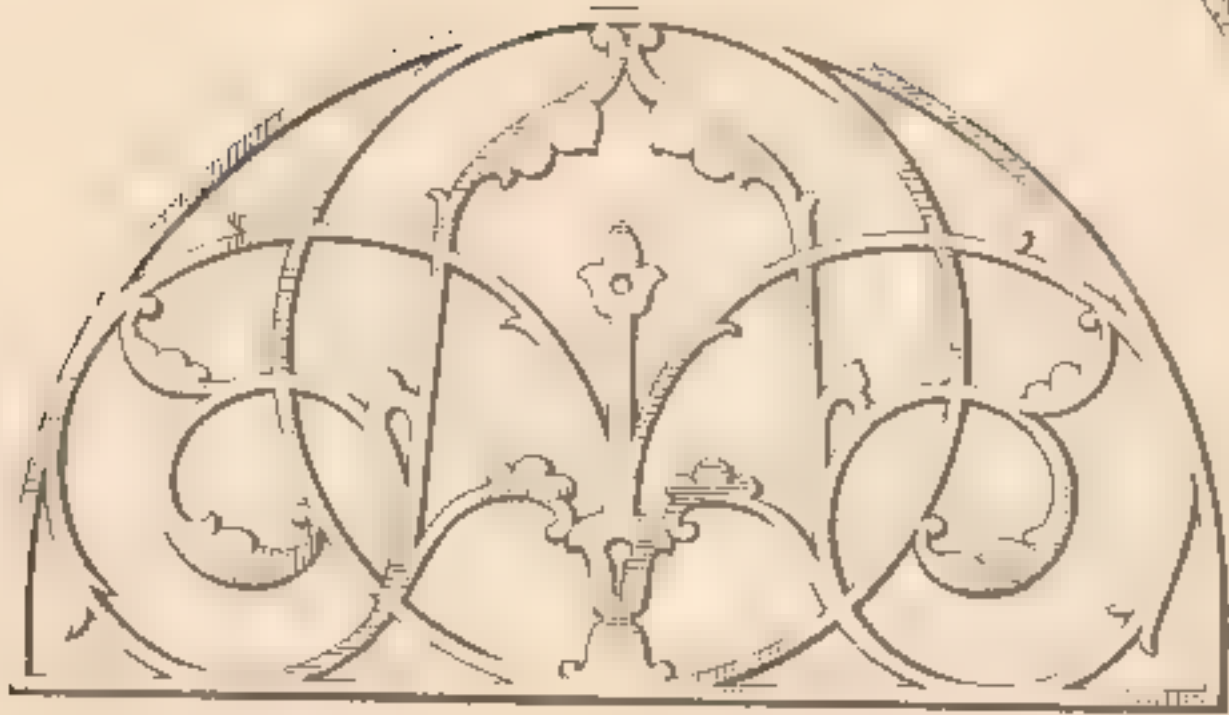
2 0"

SCALE 1 INCH = 1 FOOT.

MACFARLANE'S PANELS

1

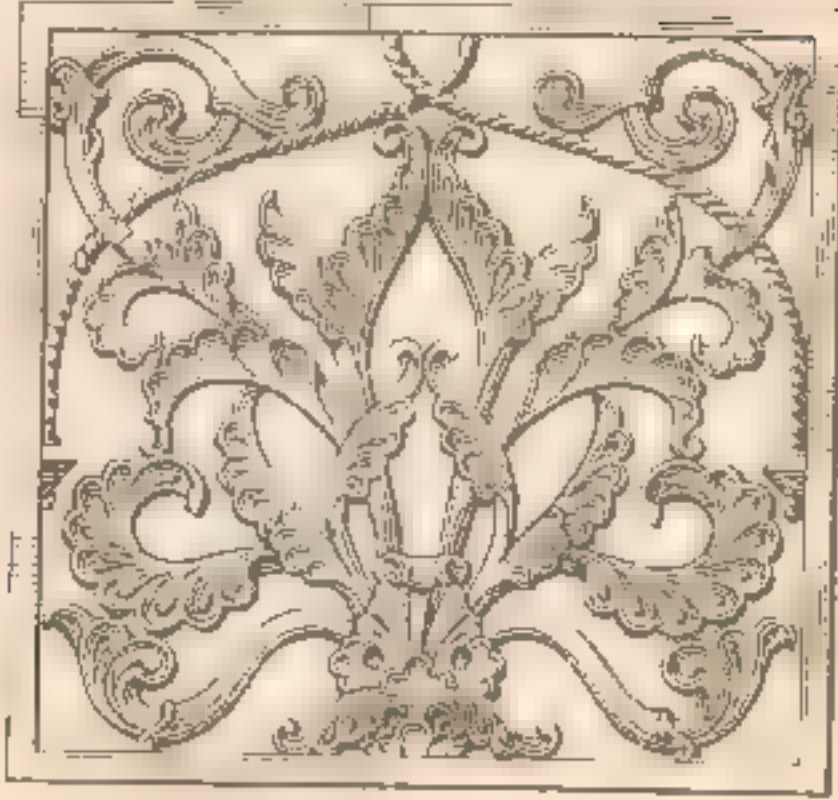
Nº 221



3 6"

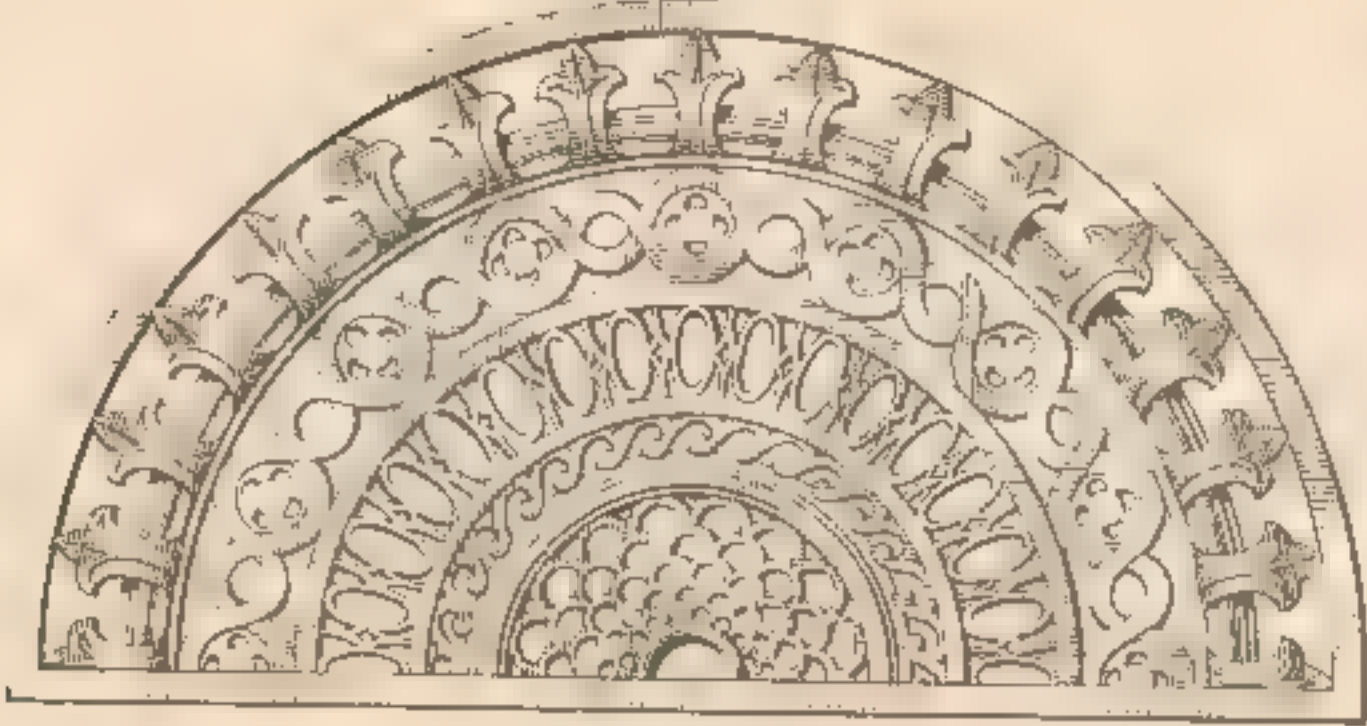
2 0"

Nº 36



3 2"

Nº 347



3 0 1/4"

One face

Nº 5

2 0"

Nº 36 2

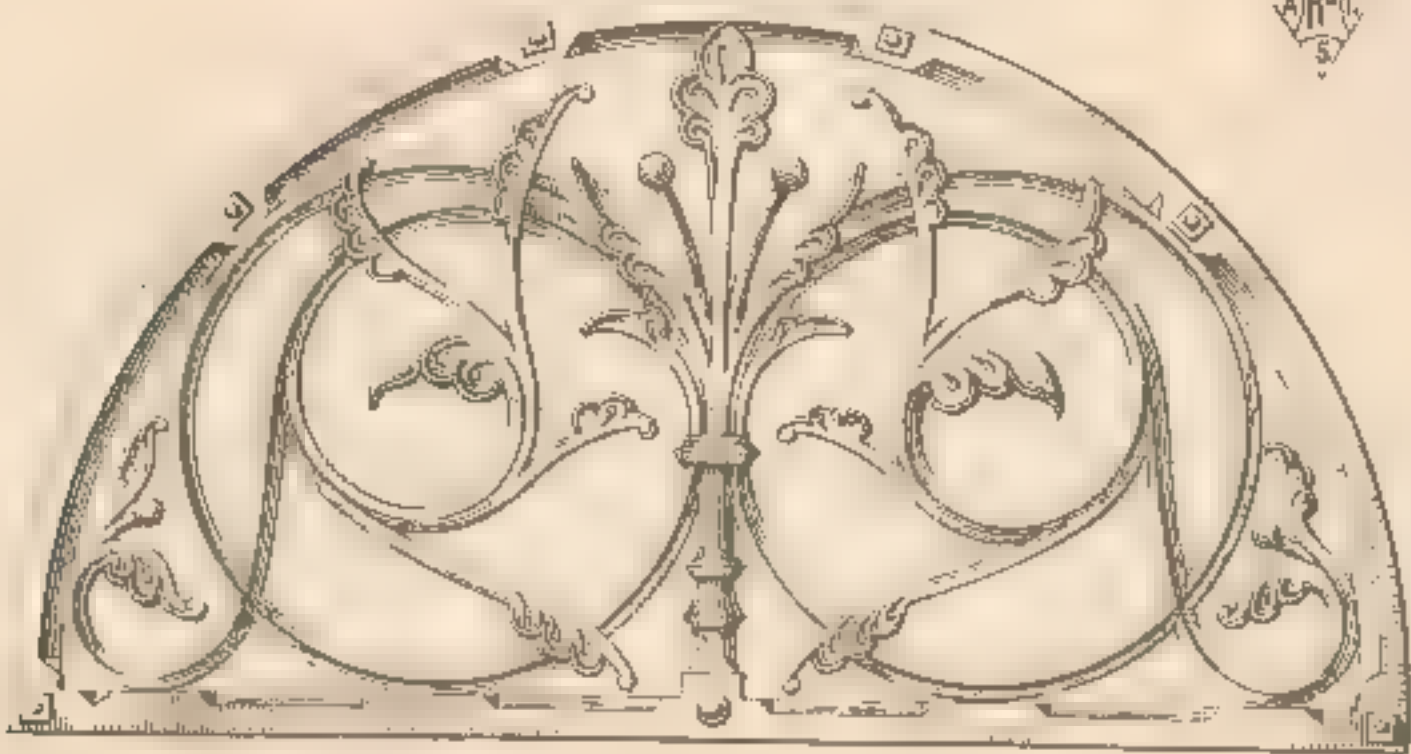


2 4"

Nº 8 1/2

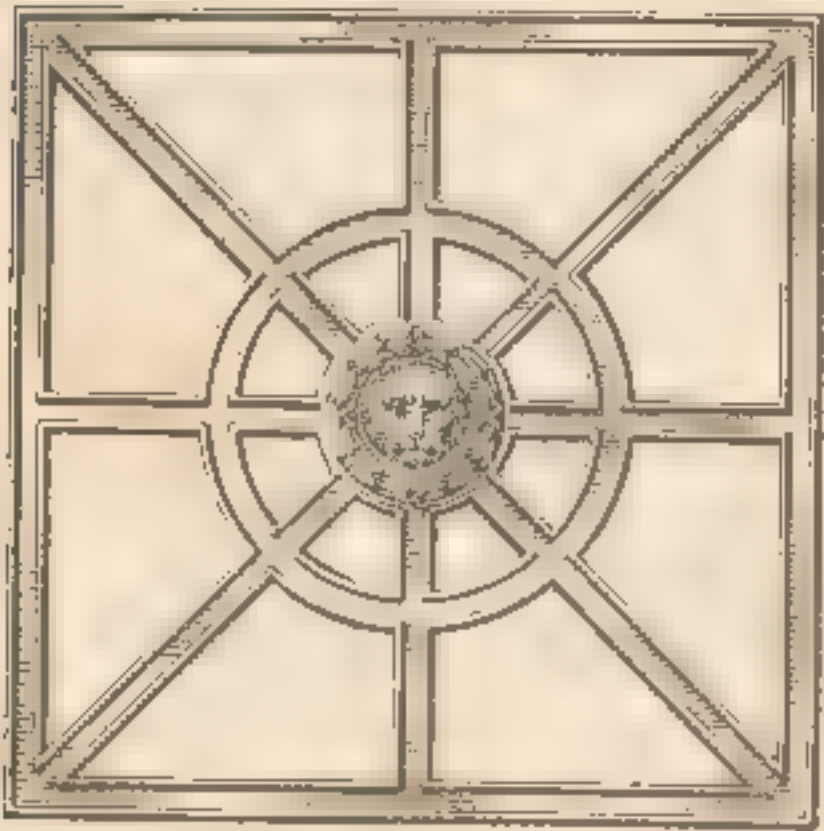


2 2"



4 0"

Nº 397



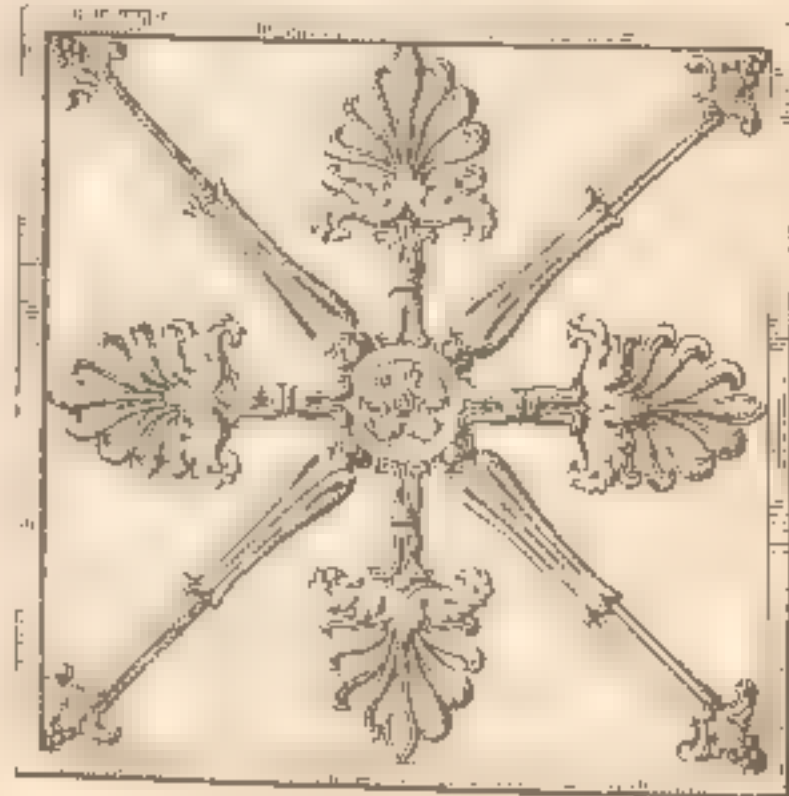
2 2"

Nº 8 1/2



3"

Nº 24



2 2"

SCALE 1 INCH = 1 FOOT

MACFARLANE'S PANELS

Nº 332



Nº 33



Nº 49



Nº 9

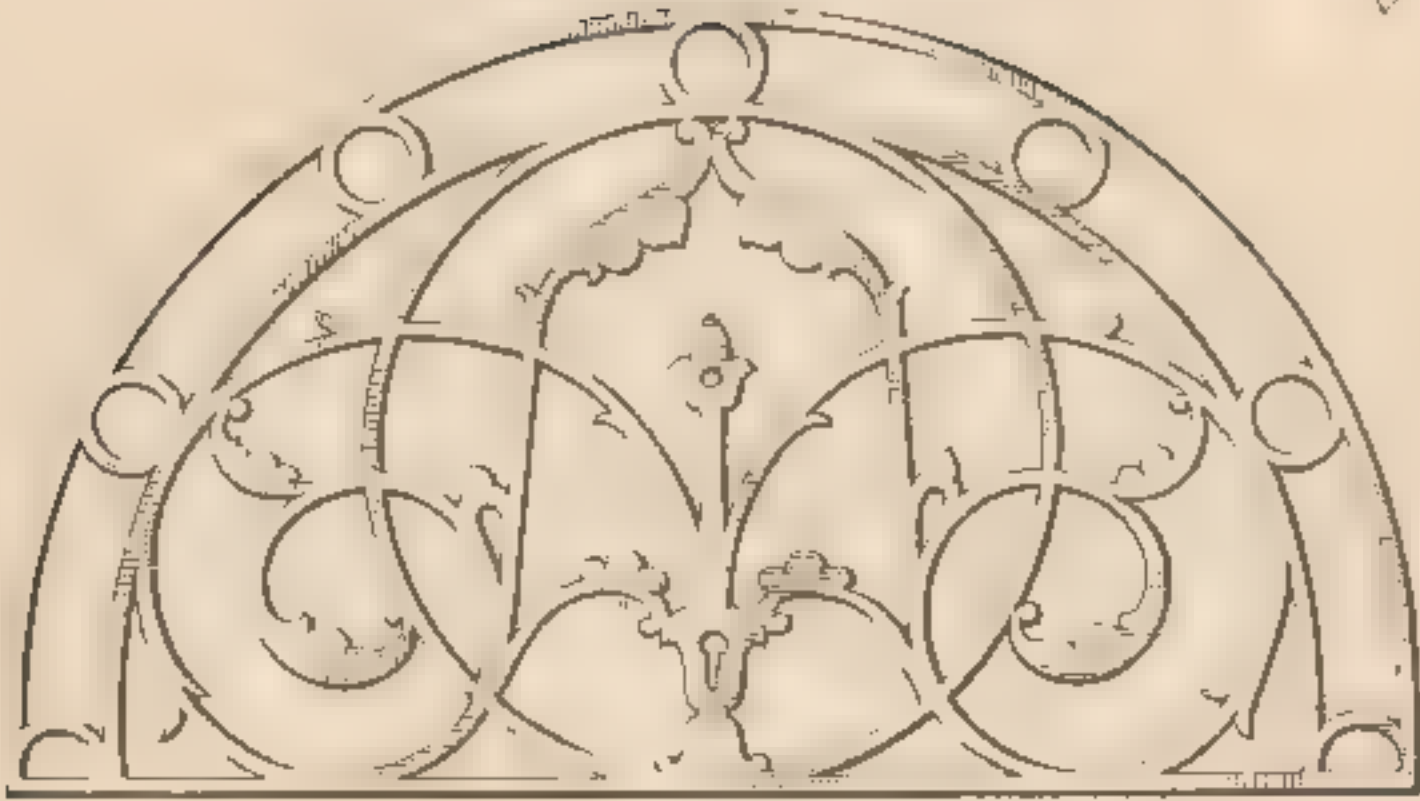


Nº 85

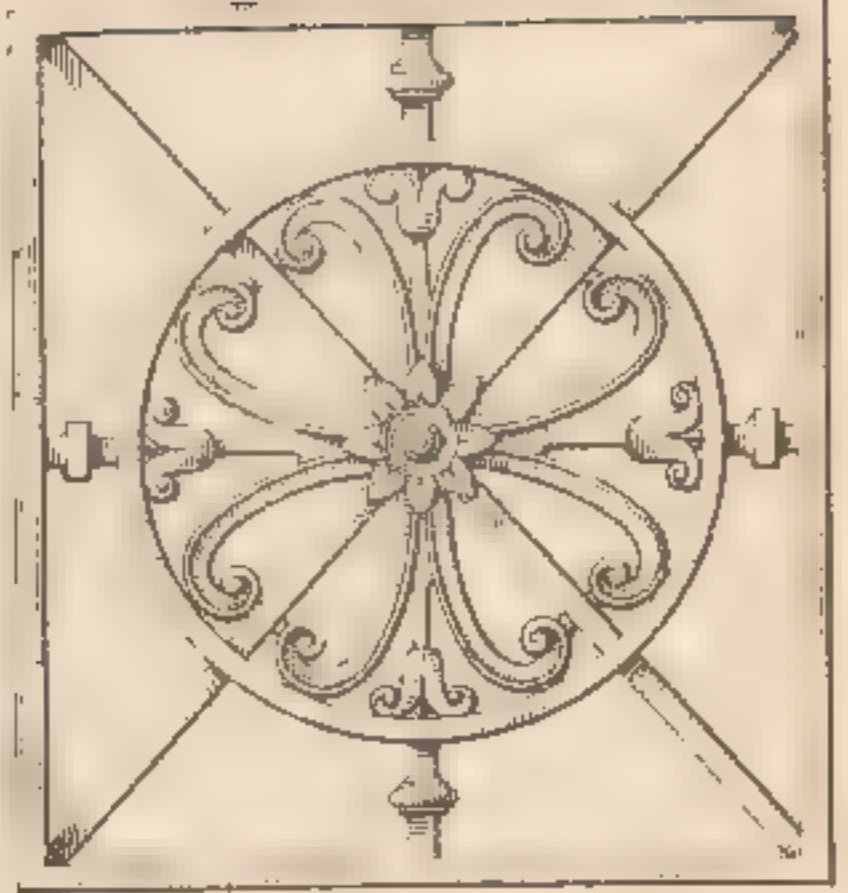


MACFARLANE'S PANEL.

Nº 221

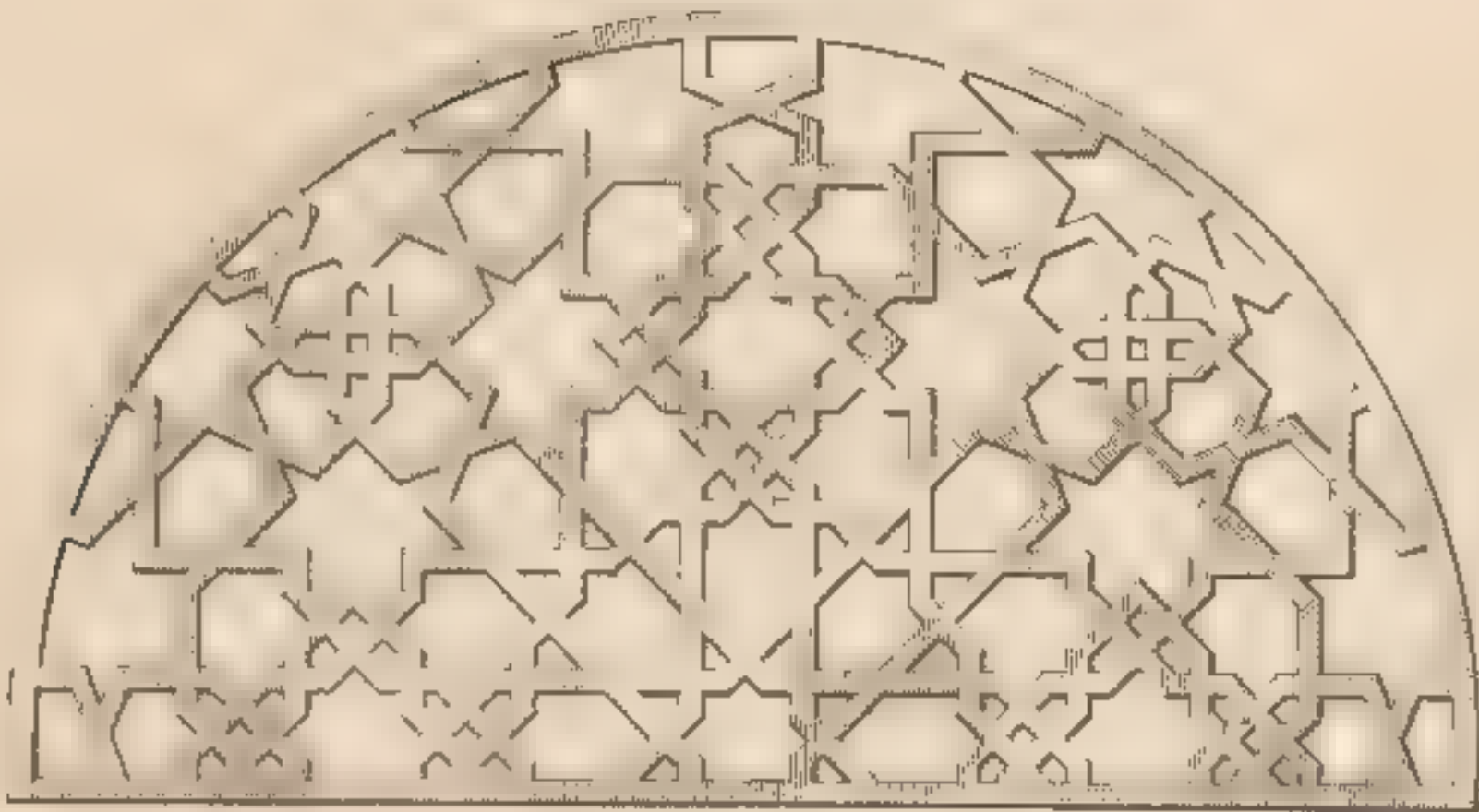
4 Q^r

No. 72



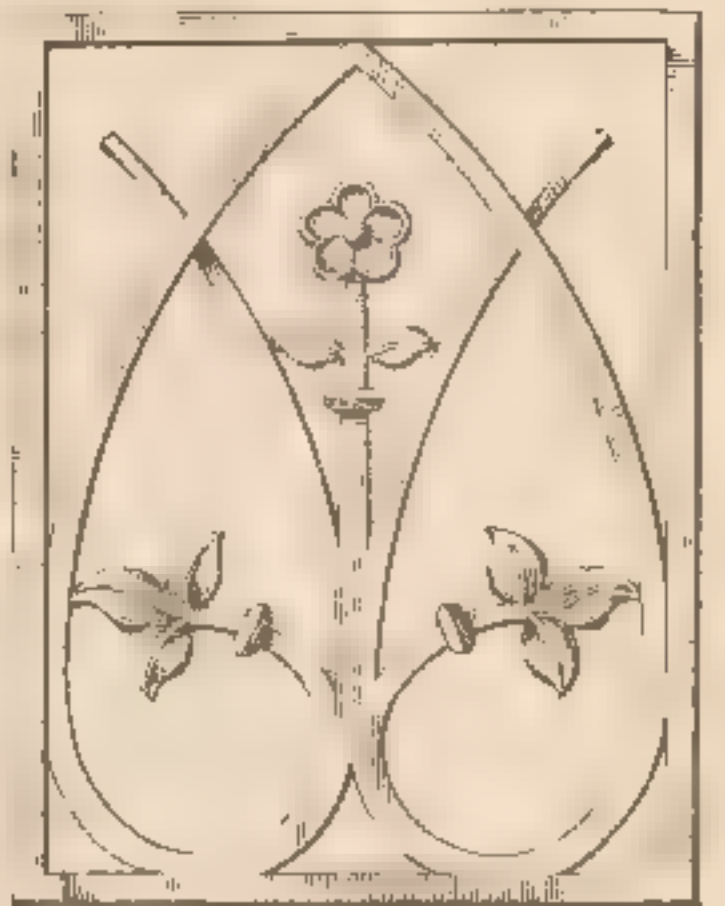
2 3

Nº 776

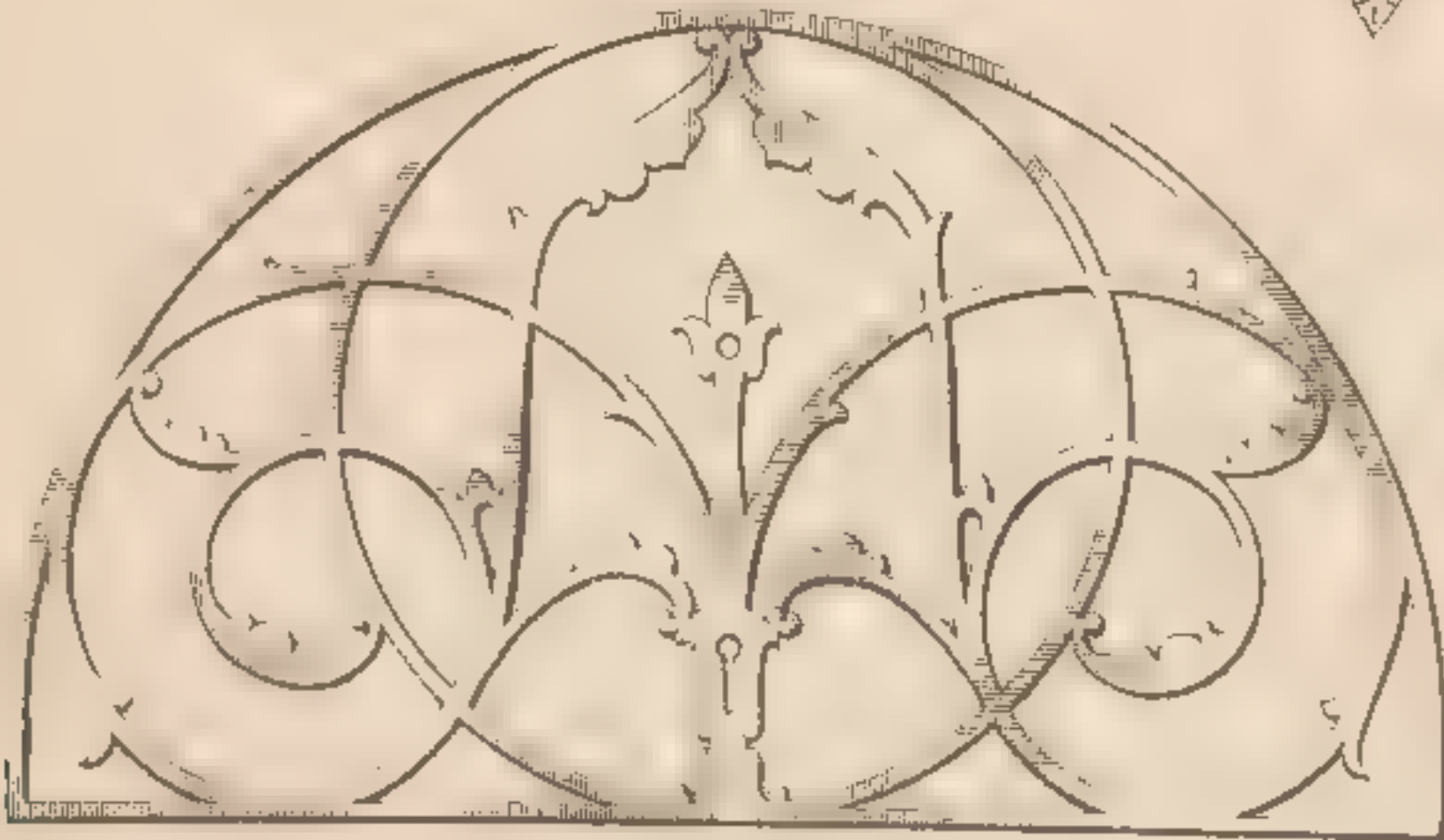


4 $\zeta_7^{3/4}$

٨٤٤



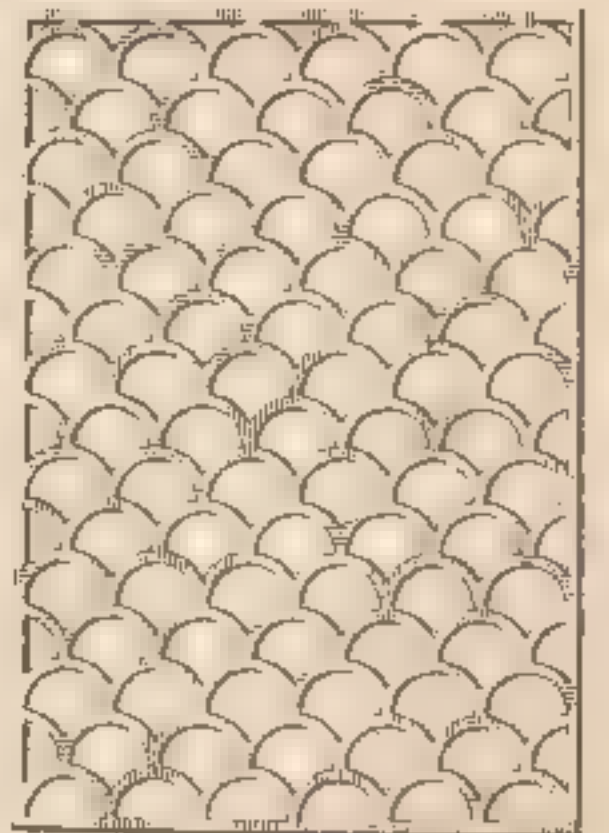
No 22



4 6



№ 257



74

MACFARLANE'S PANELS

No 347



One face

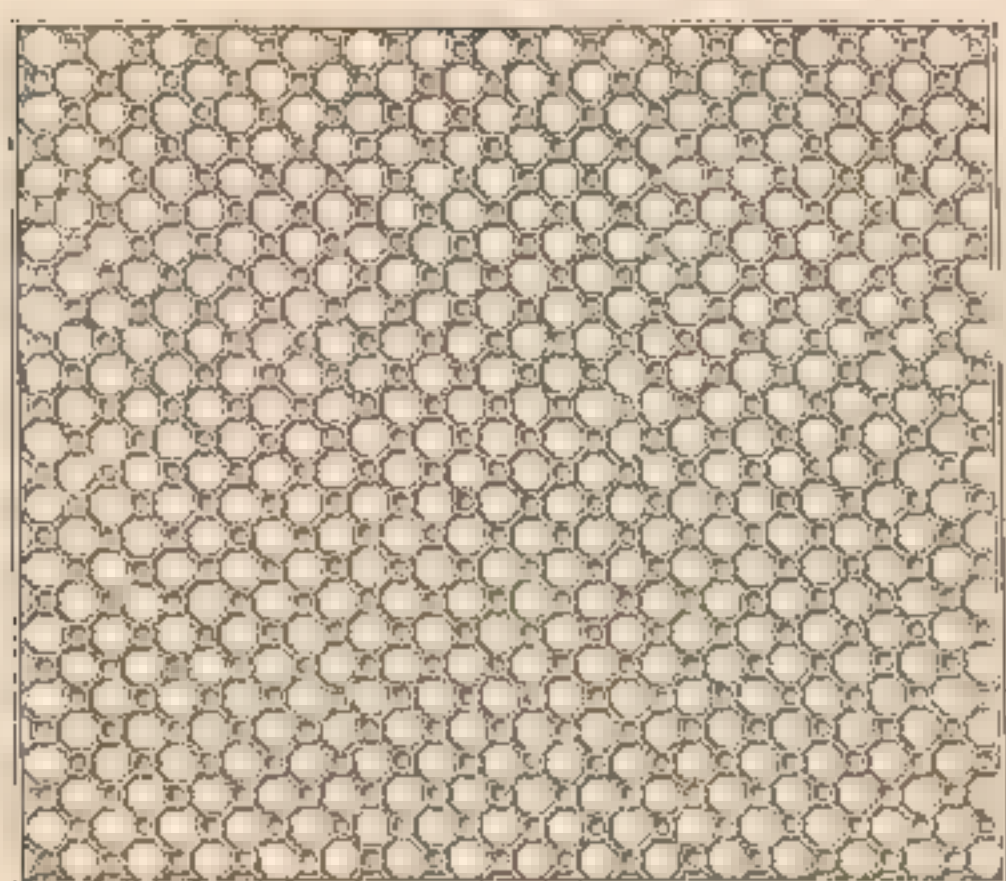
No 86



No 280



No 337

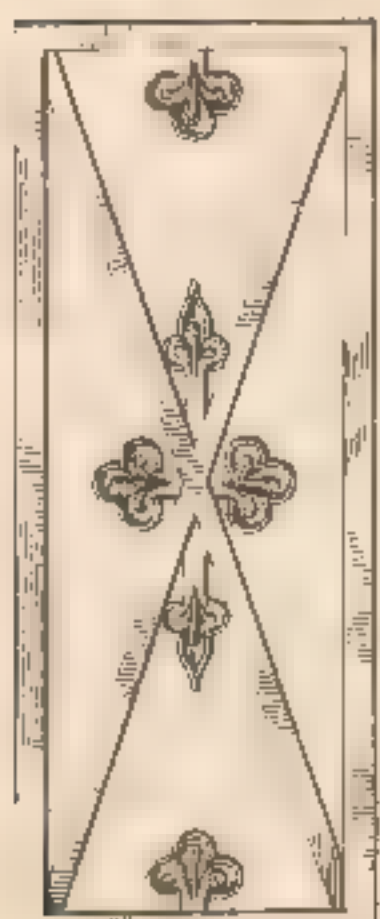


No 469

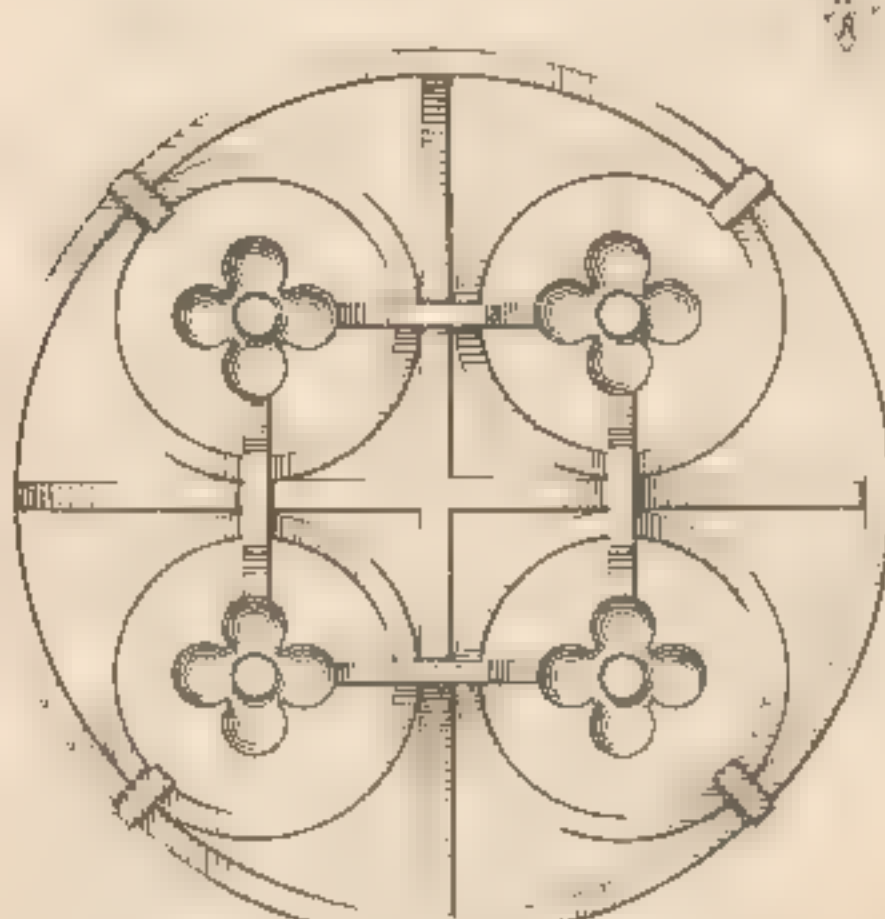


No. 469 can also be supplied for corner. See No. 145 Terminal Example, page 228.

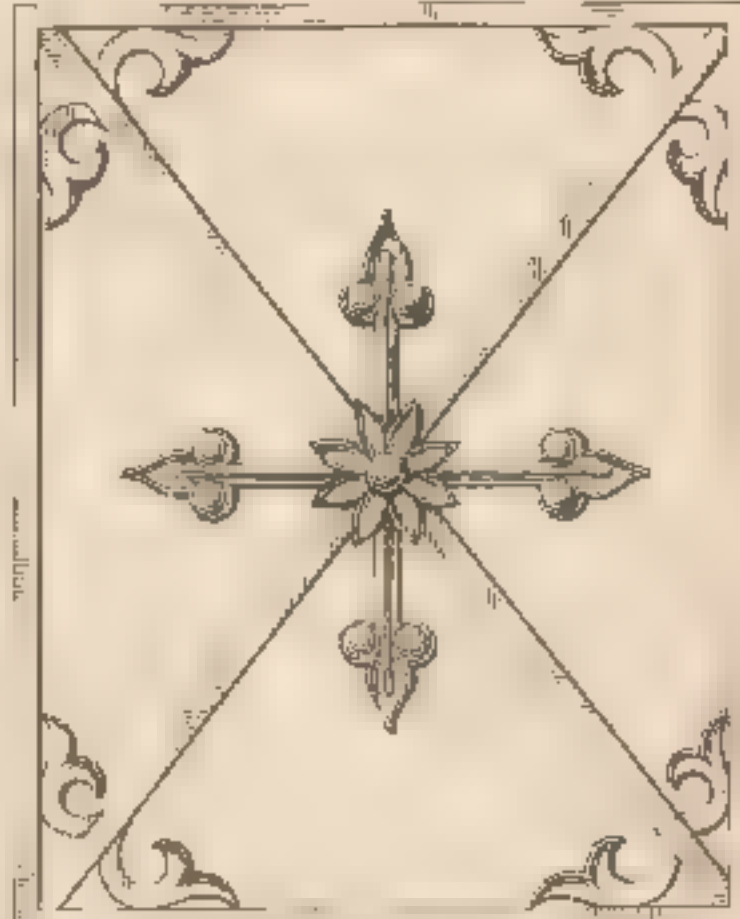
No 209



No 460



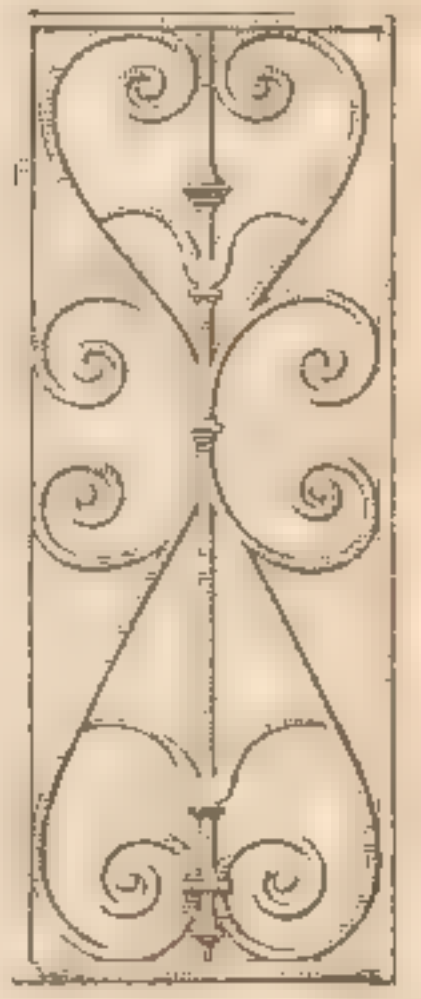
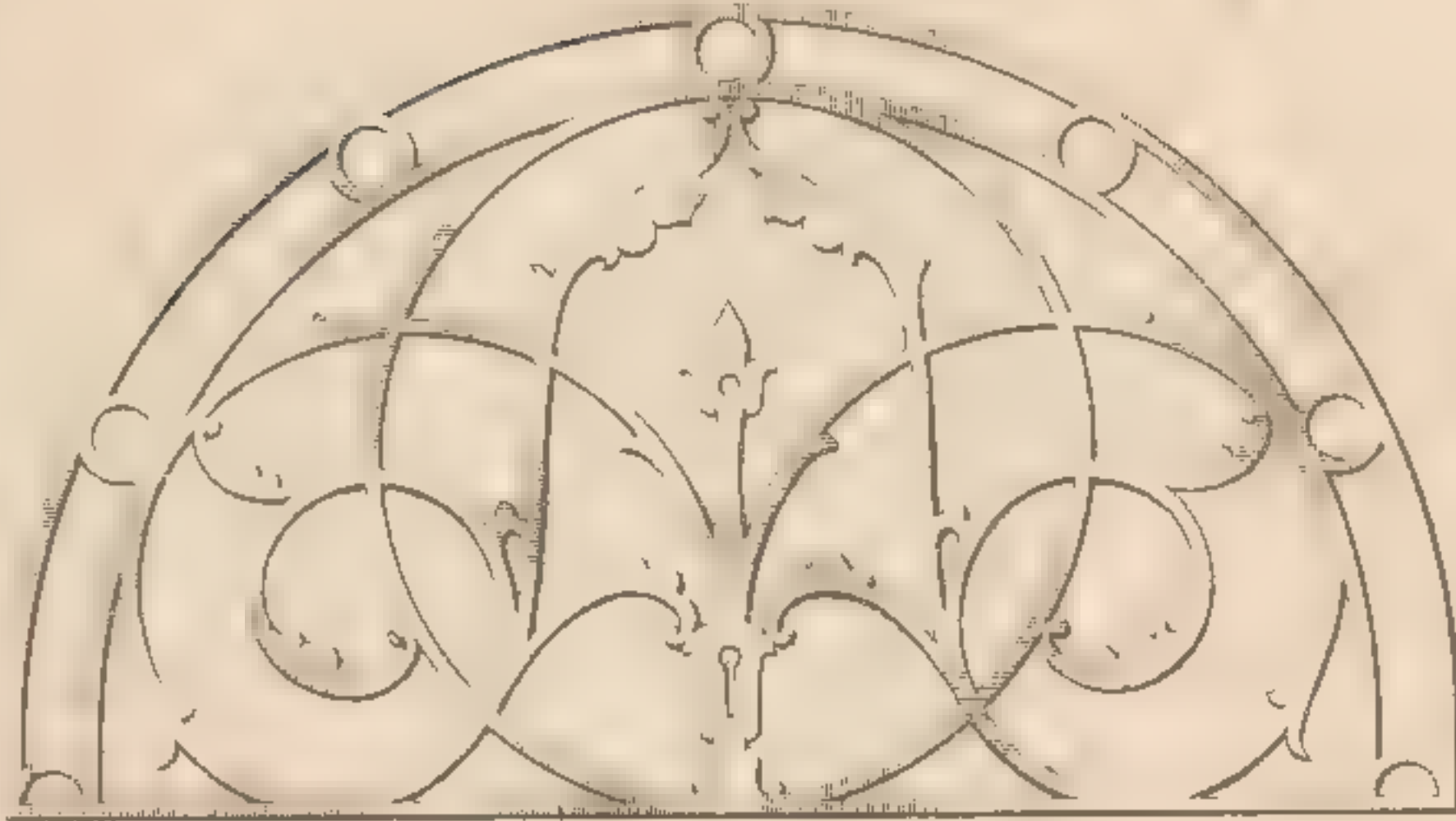
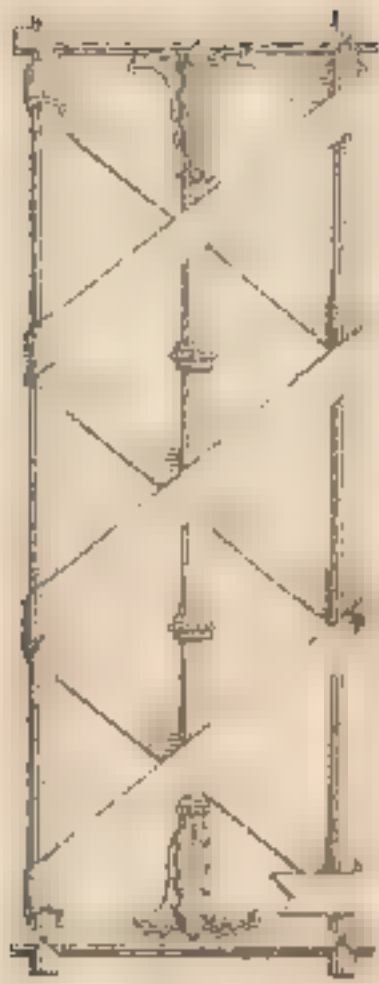
No 209



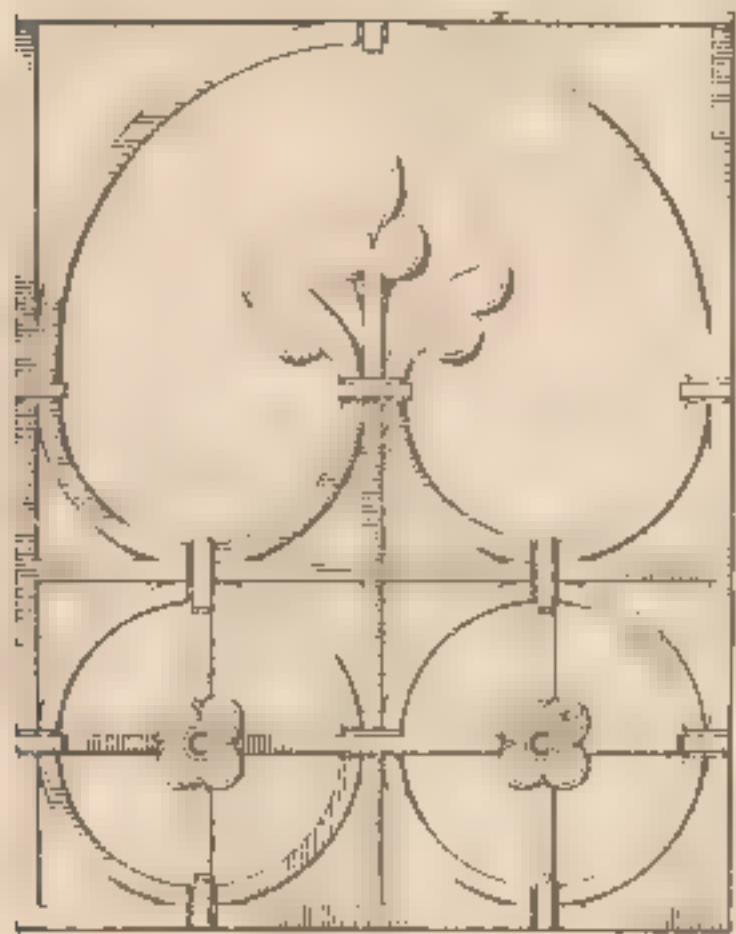
SCALE 1 INCH = FOOT

MACFARLANE'S PANELS

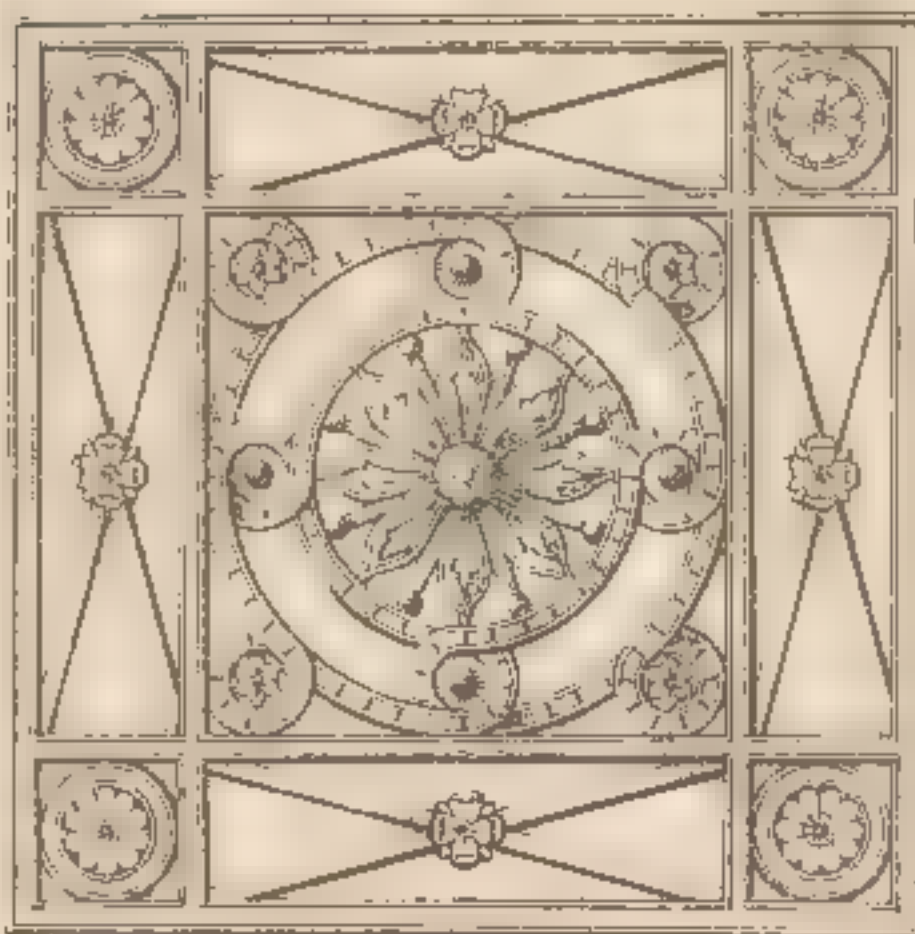
NO 221



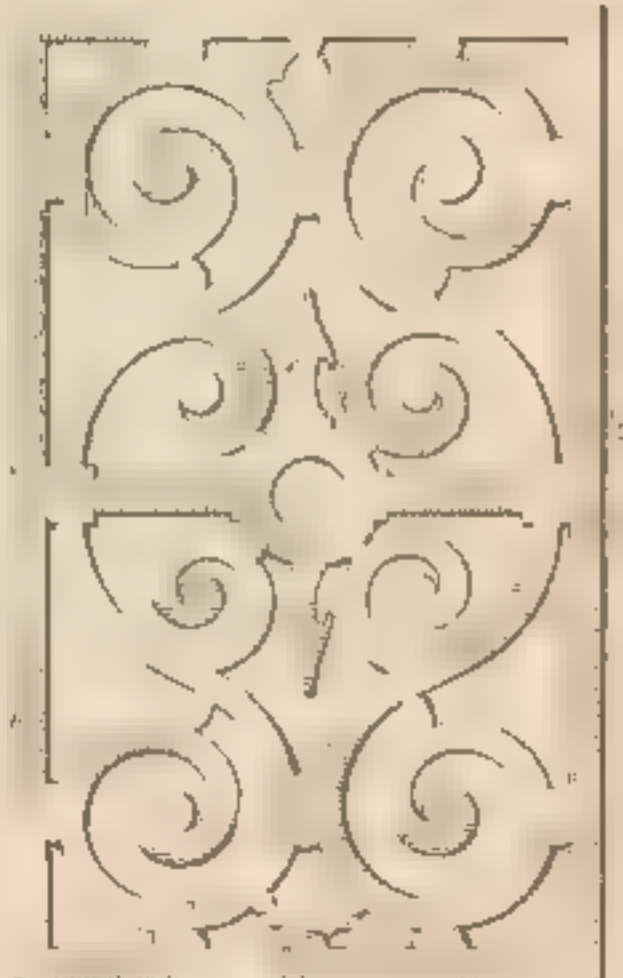
NO 222



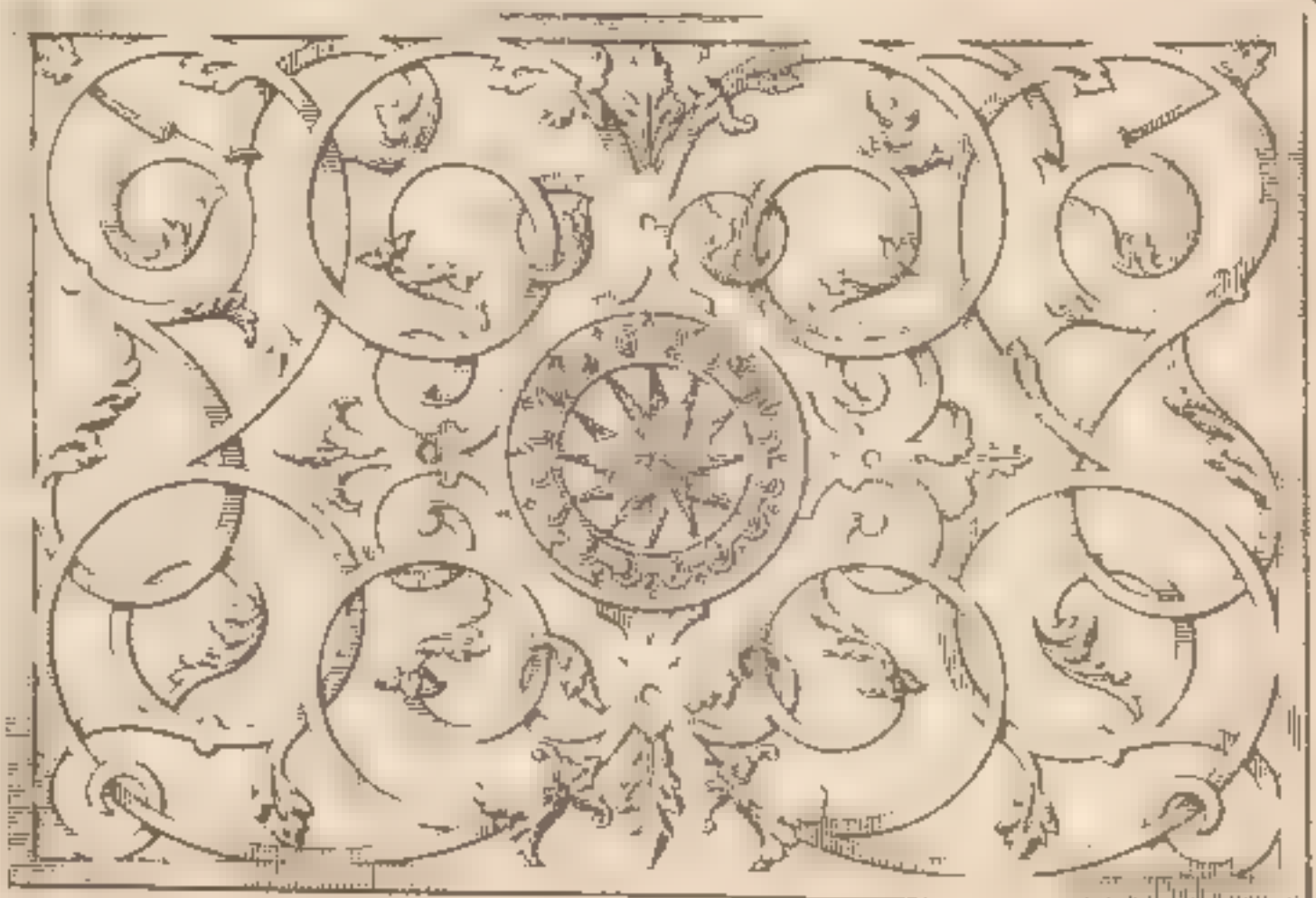
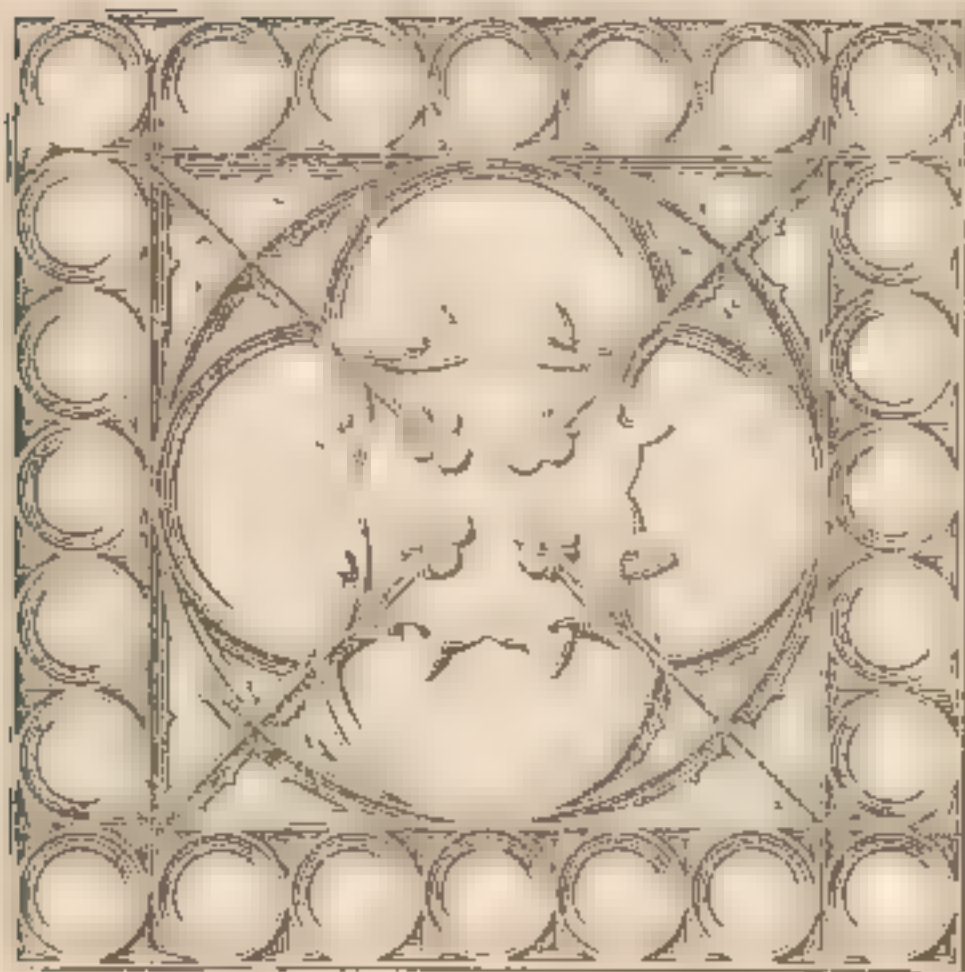
NO 223



NO 224



NO 225

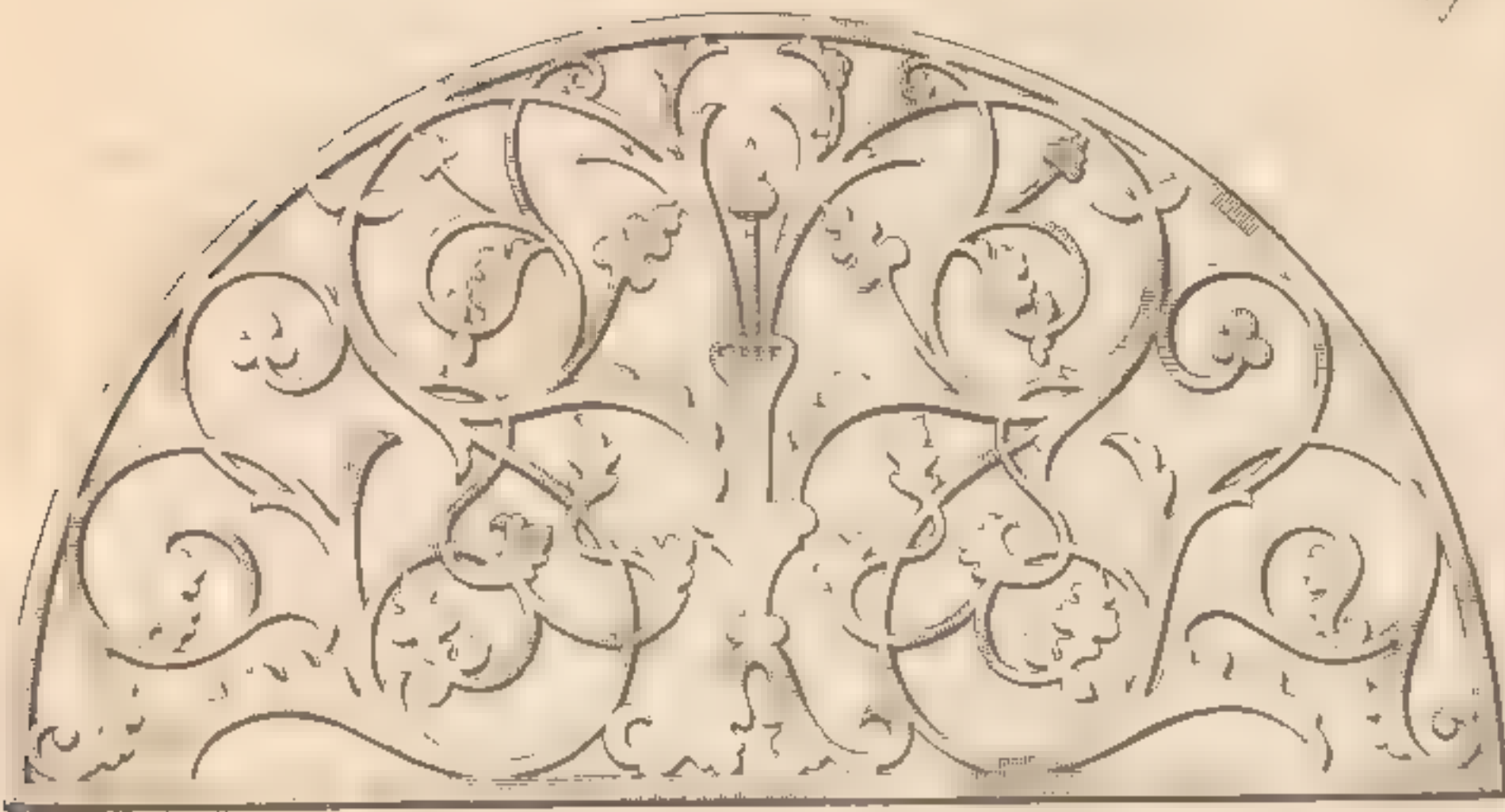


NO 226

MACFARLANE'S PANELS

MACFARLANE'S PANELS

Nº 237



5 1/2

Nº 230



2 1/2

Nº 23



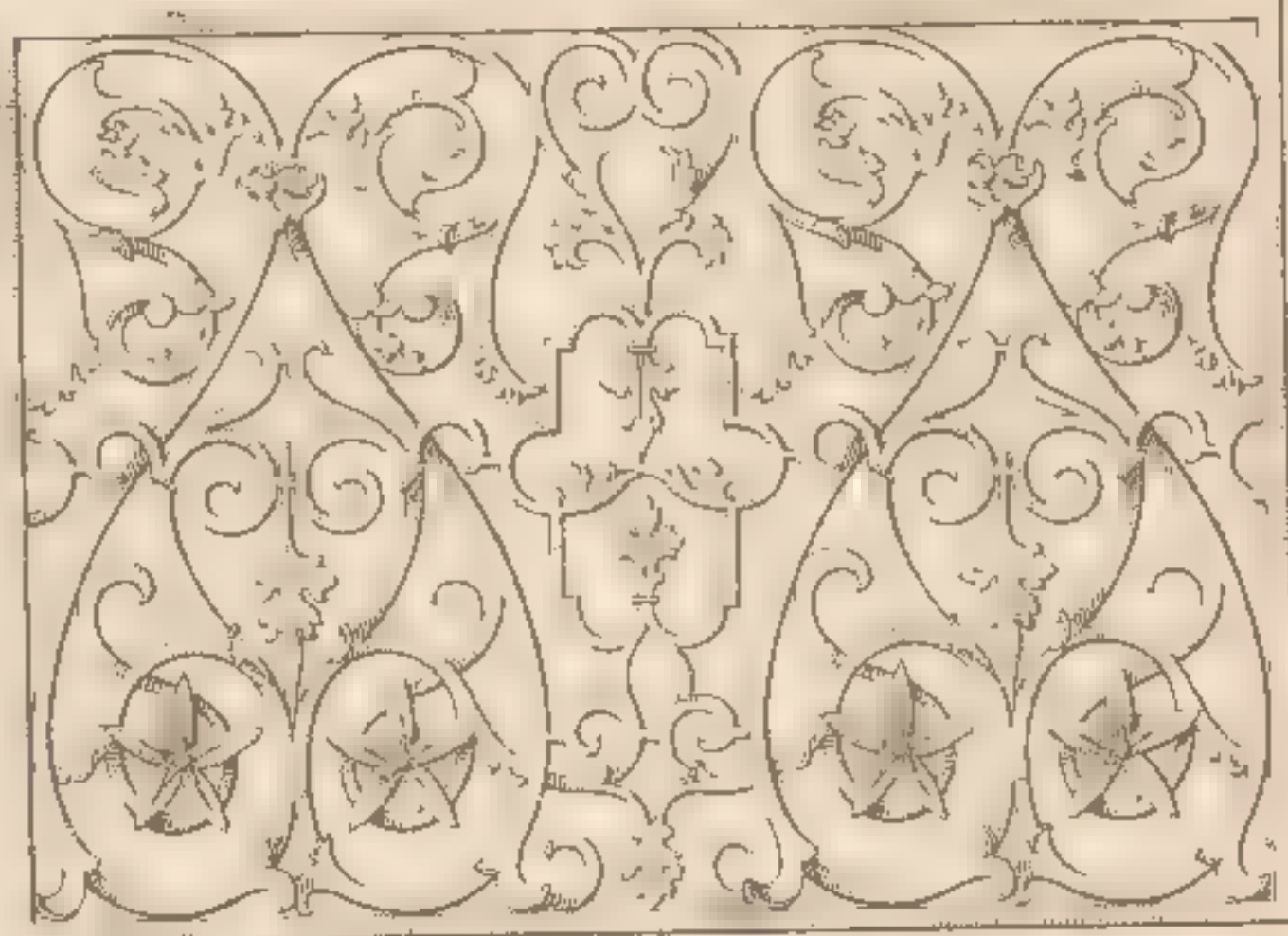
2 0 1/2

Nº 22



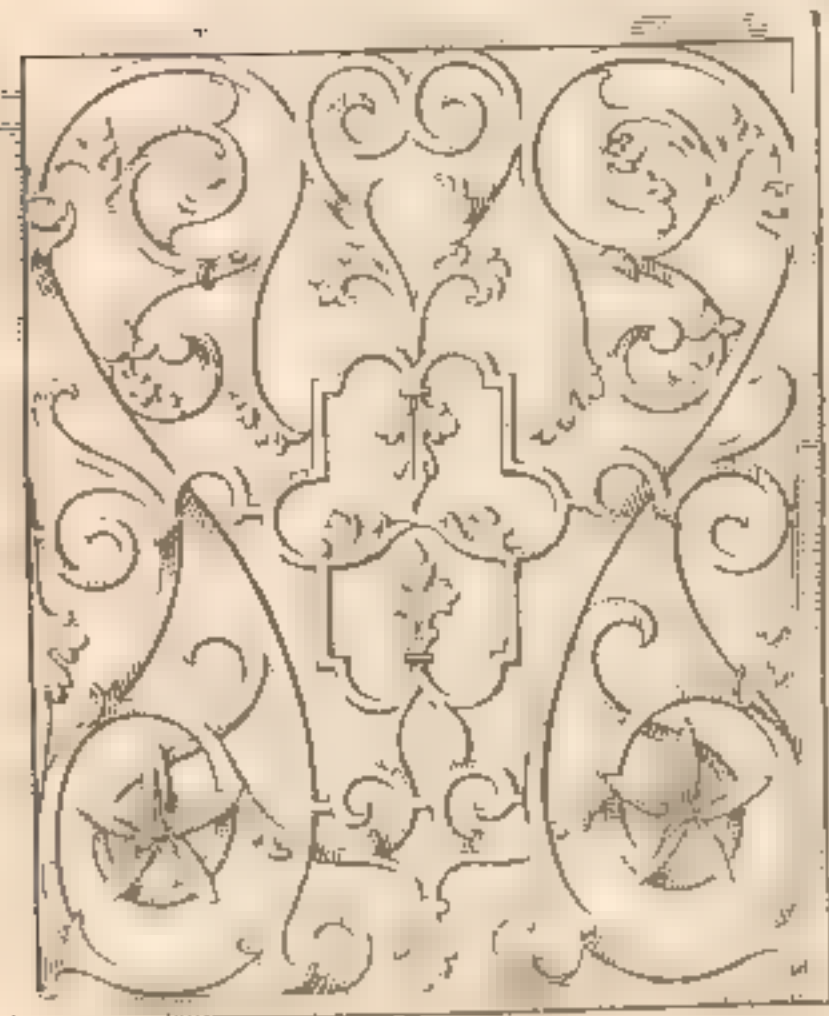
2 2

Nº 24



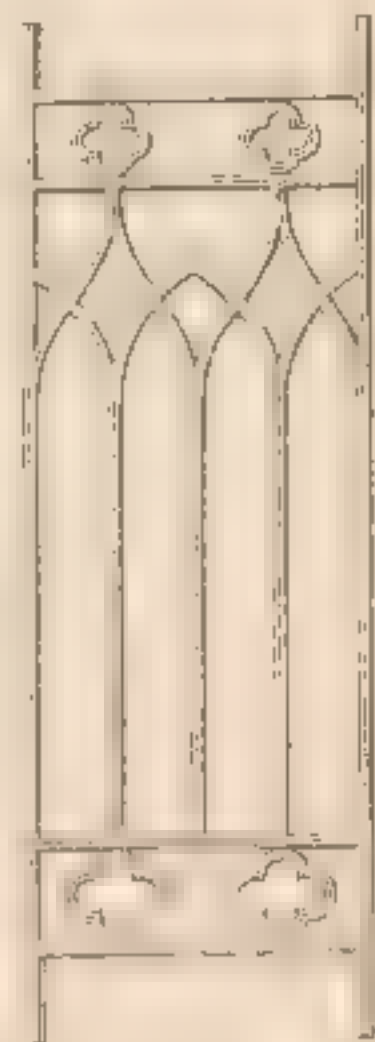
4

Nº 25



4

Nº 394

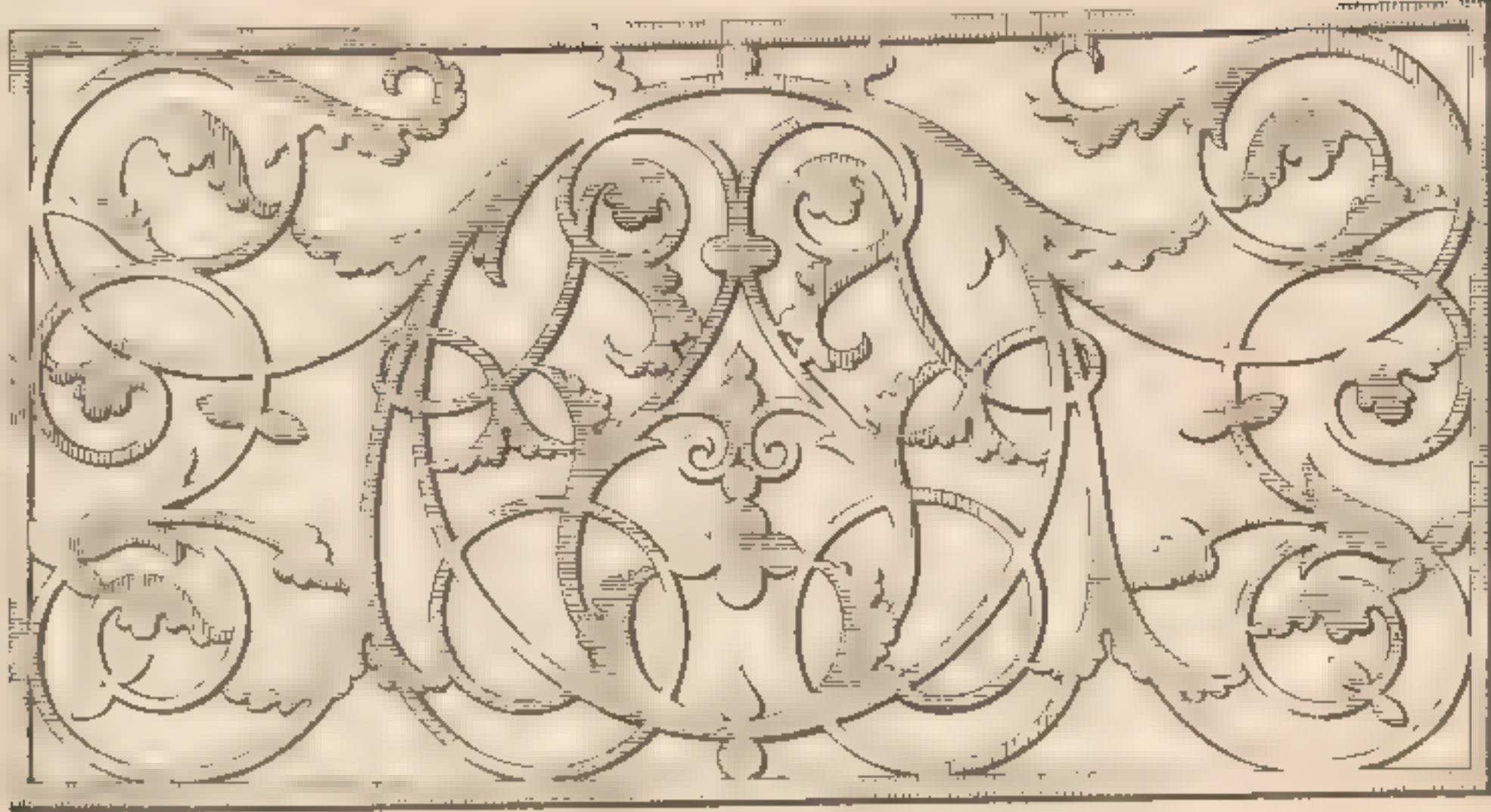


3

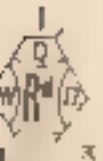
1 A L N H T FOOT

MACFARLANE'S PANELS

No 236

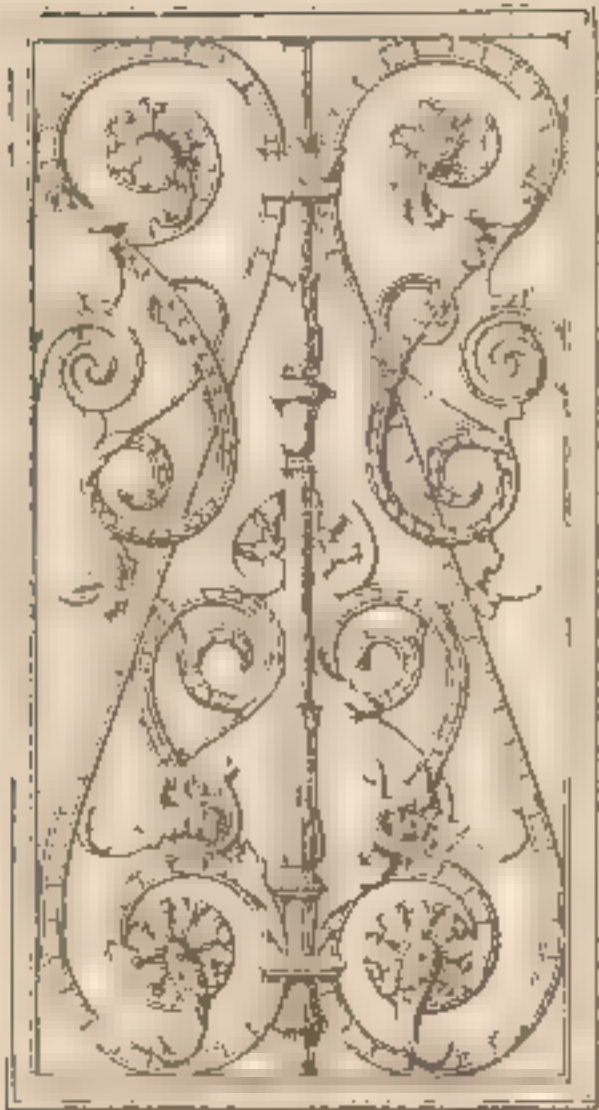


5 b



2 1

F 5



8

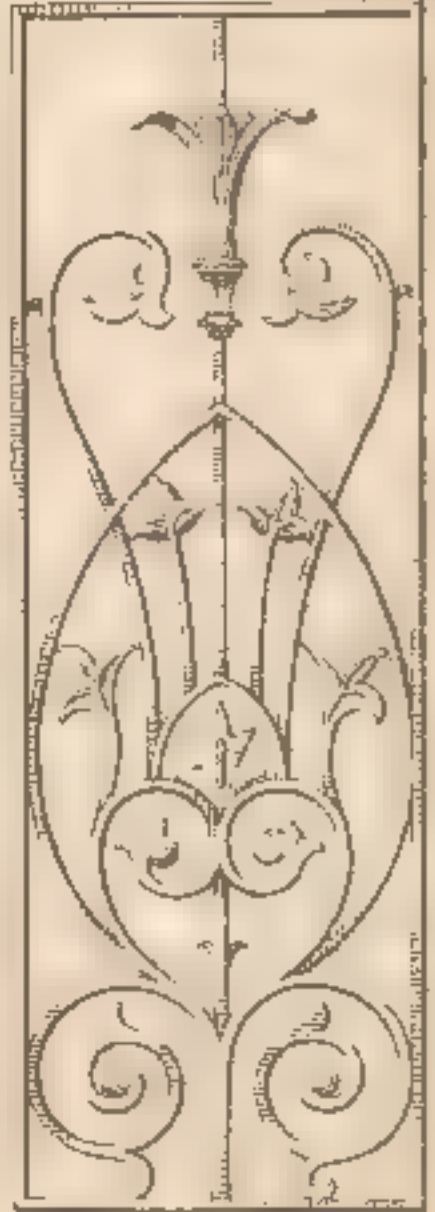


No 347



One face.

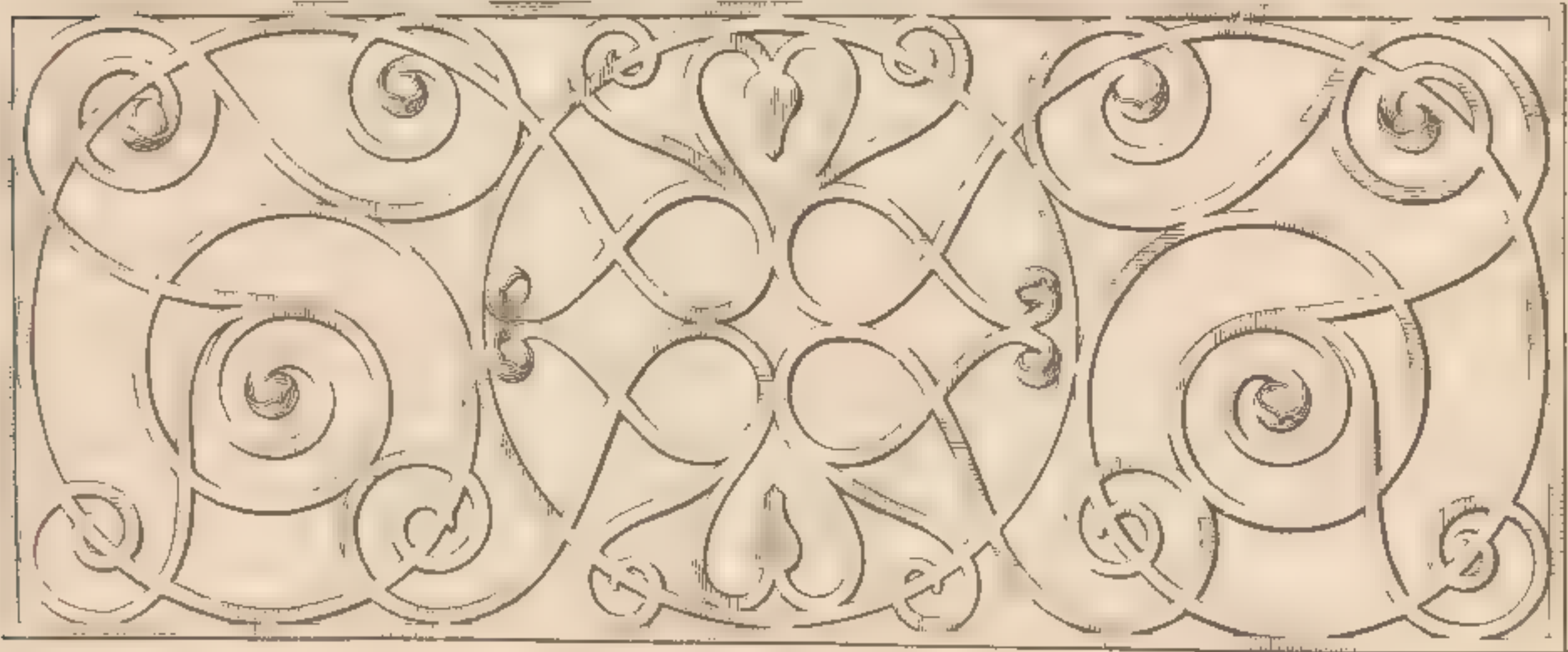
No 353



1 4



No 357



A. F. N. H. F. J.

2 3

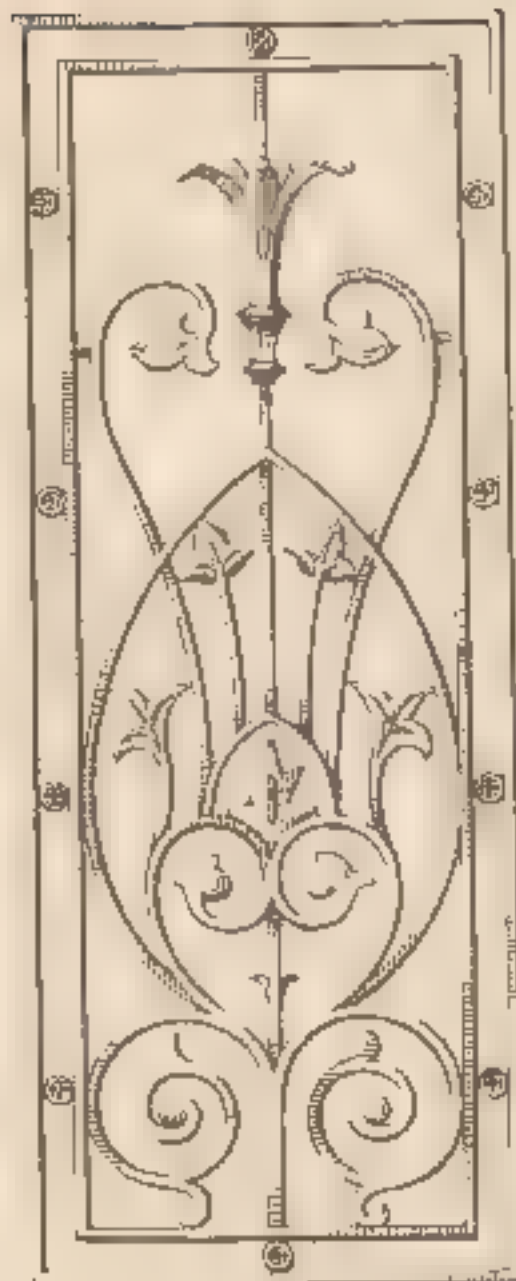
MACFARLANE'S PANELS

No 17



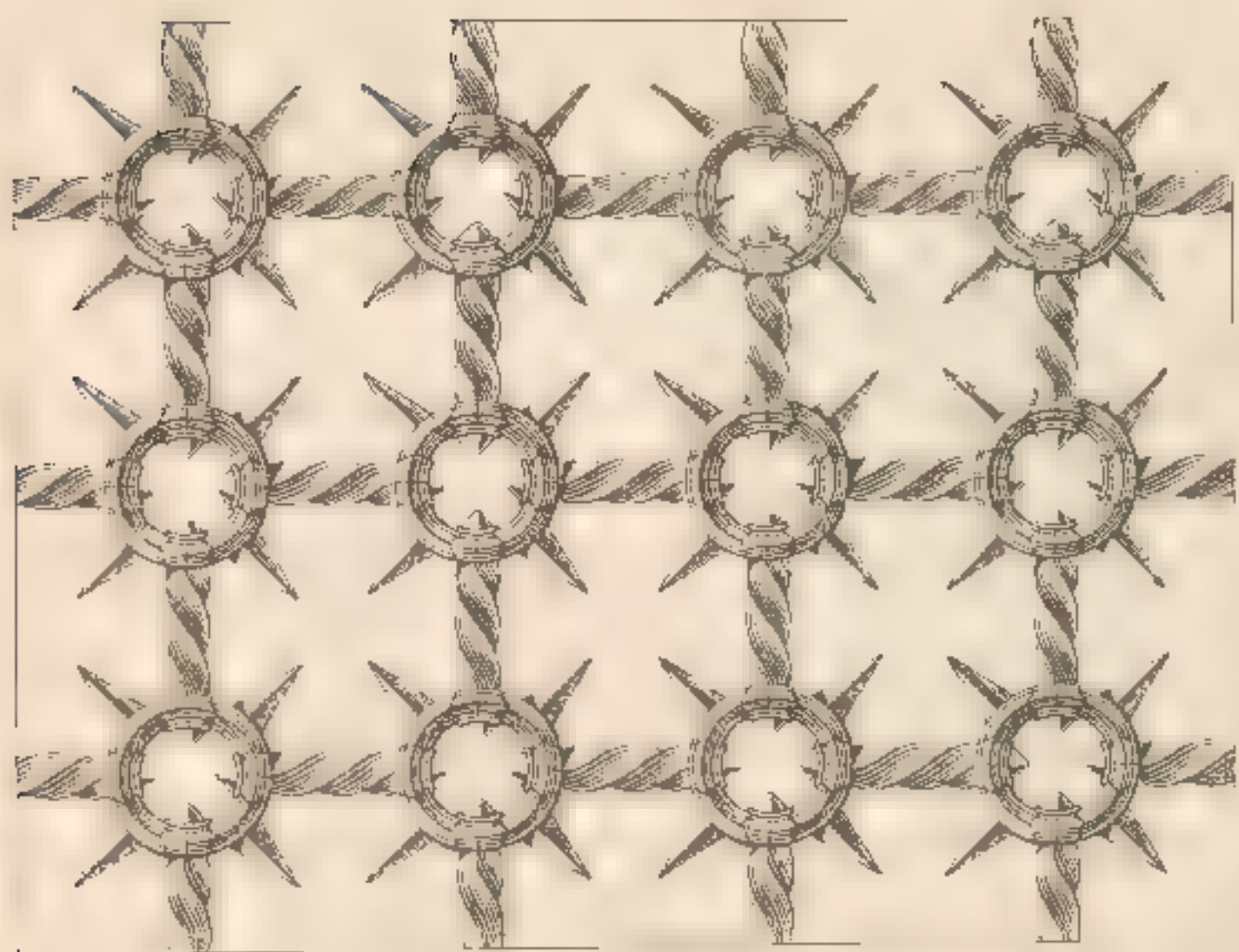
5 3

No 23



4 2

No 74



4 2

Any size to order

No 83



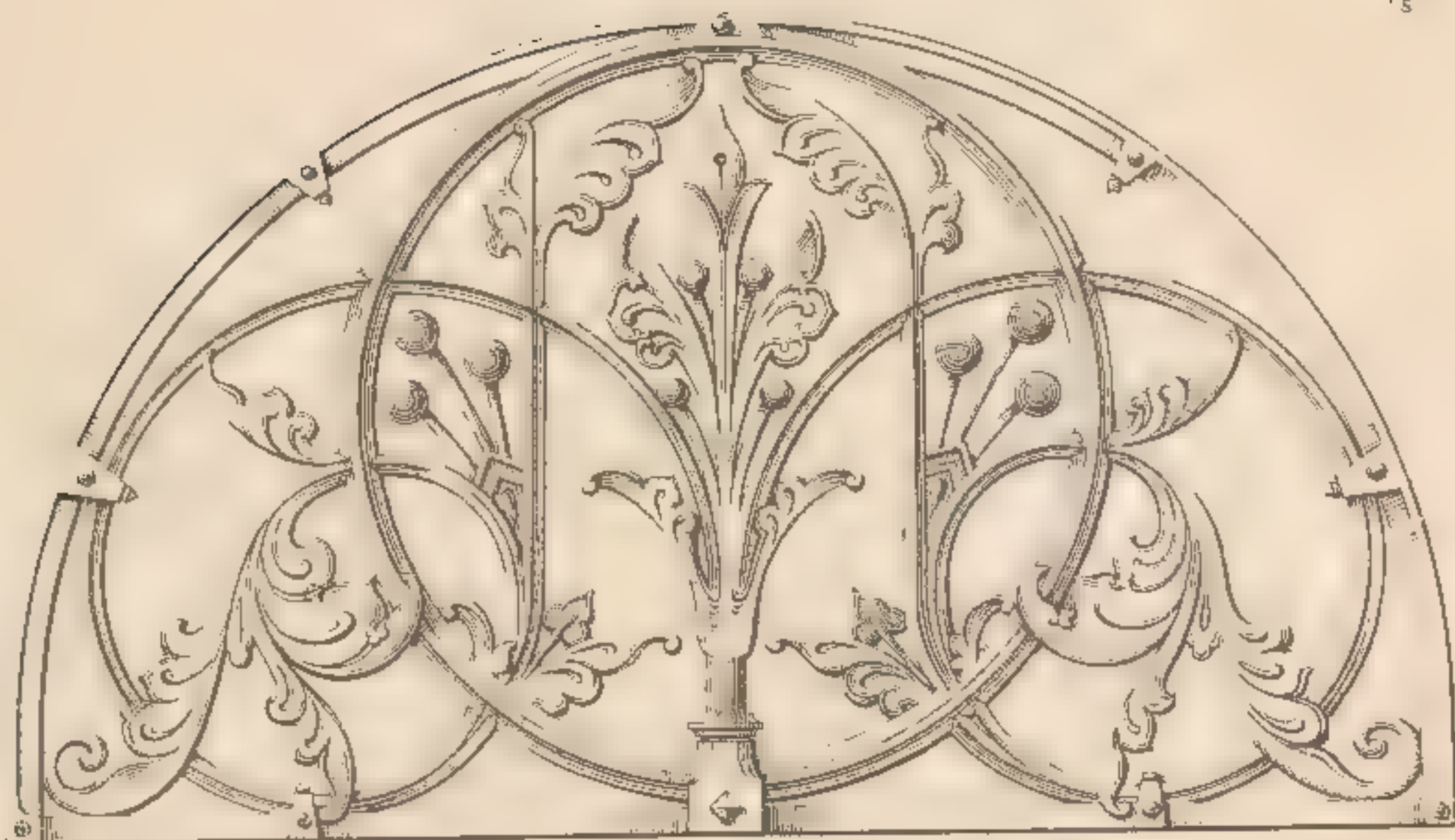
9 2

SCALE INCH — | FOOT

MACFARLANE'S PANELS

Nº 177

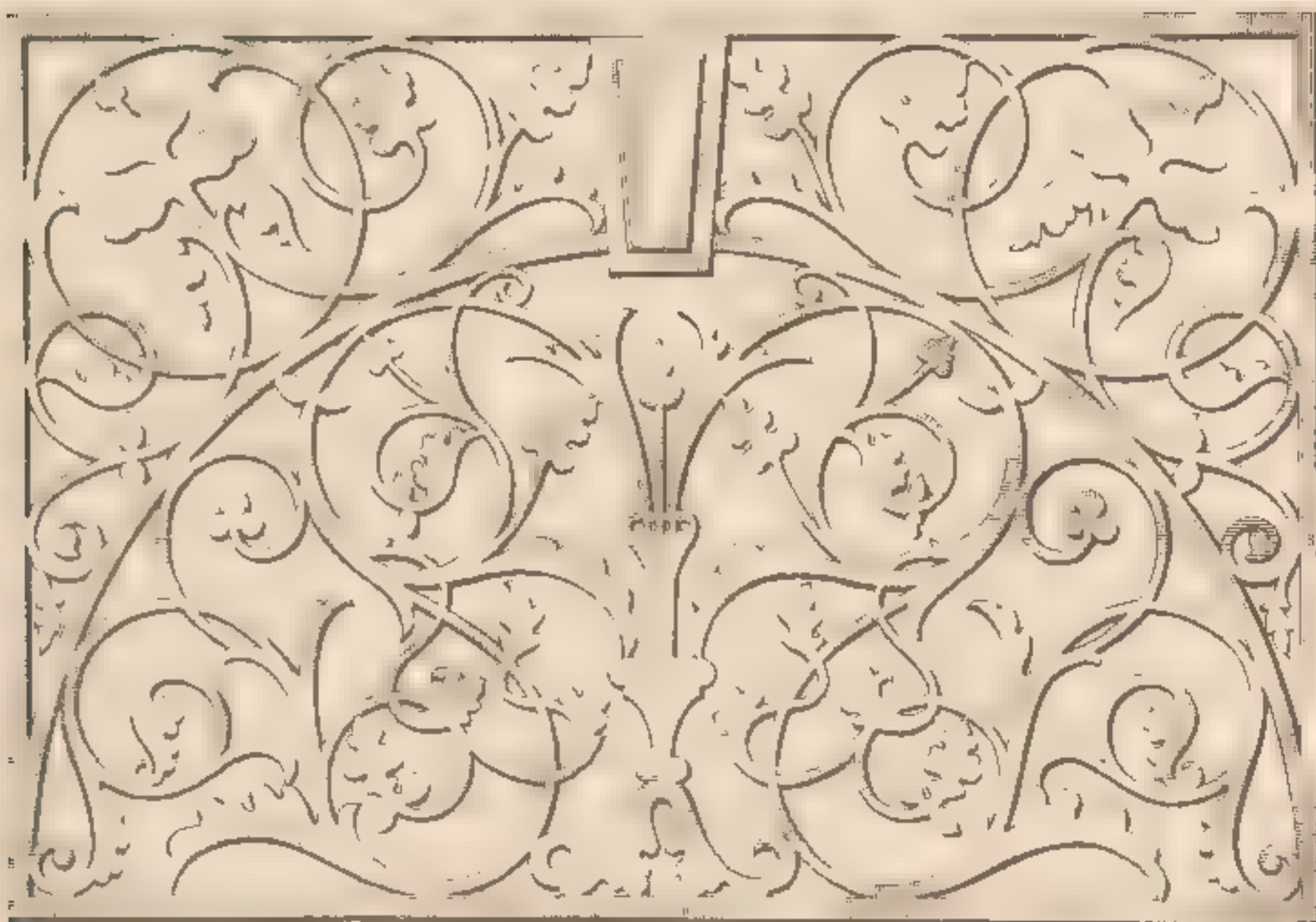
APR 1878



5 0

Nº 237

APR 1878



5 6

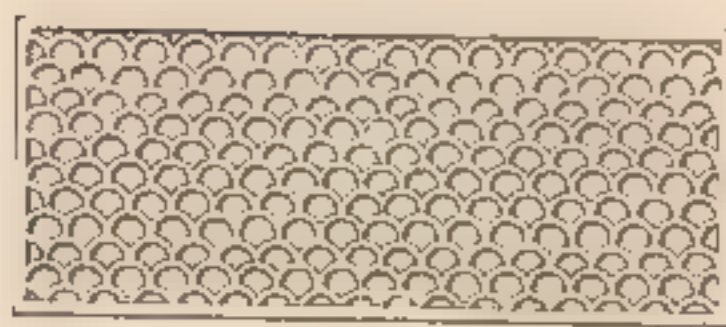
SCALE INCH FEET

MACFARLANE'S PANELS

Nº 23



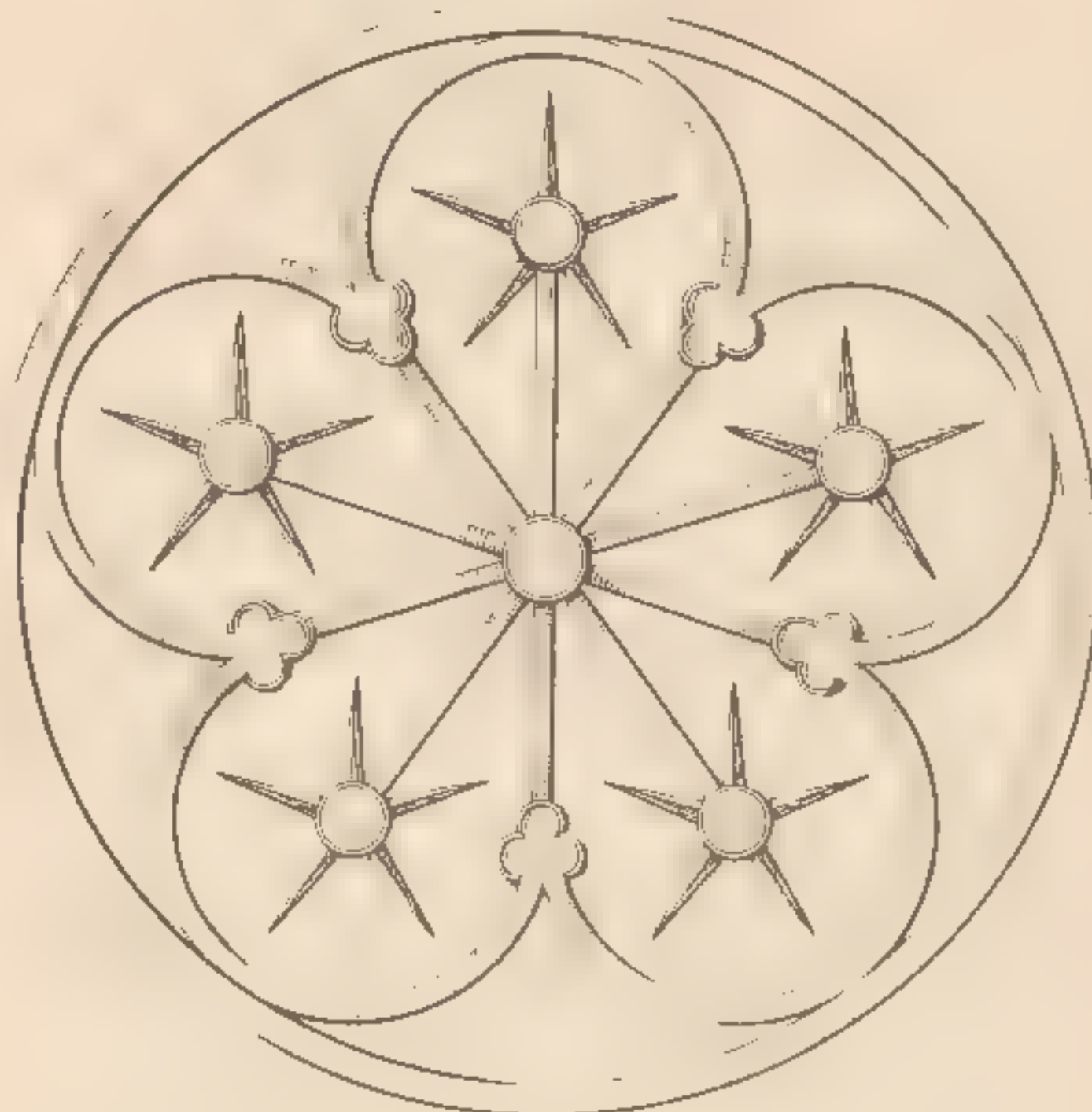
Nº 333



Nº 2



Nº 26



One face.

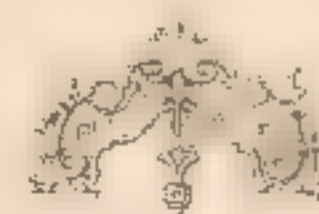
Nº 347



One face

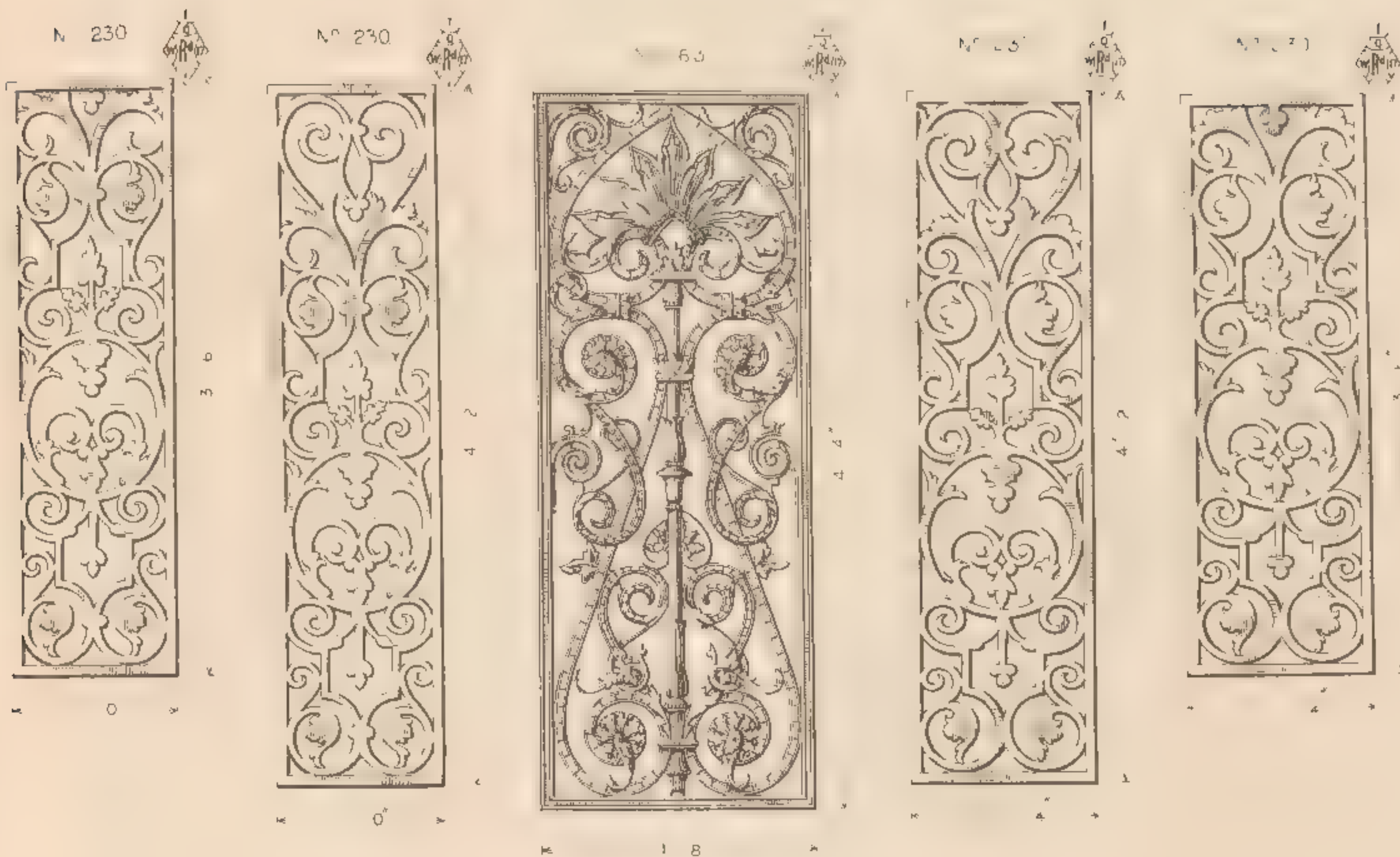
A F H F O O T

Nº 27C



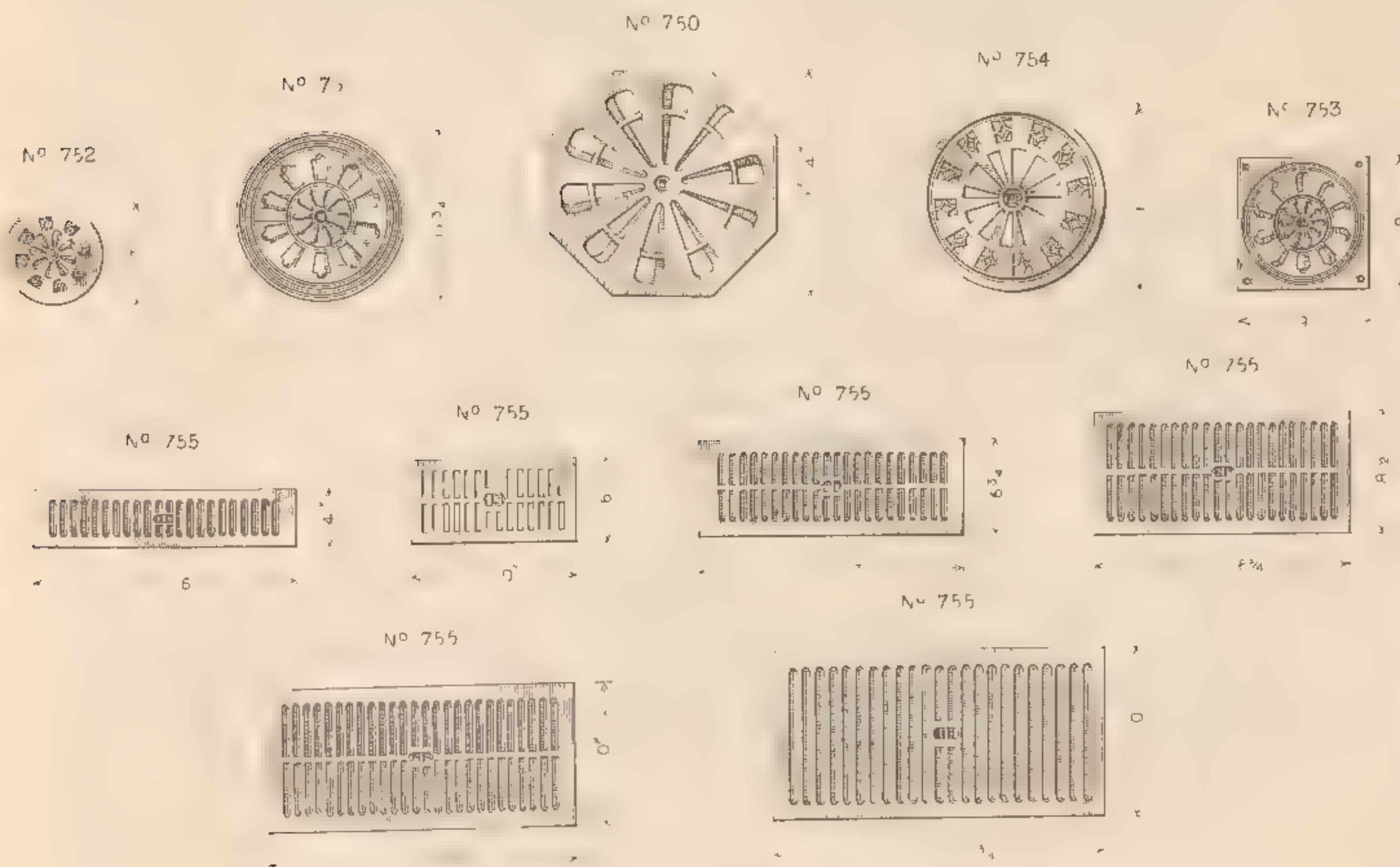


MACFARLANE'S PANELS

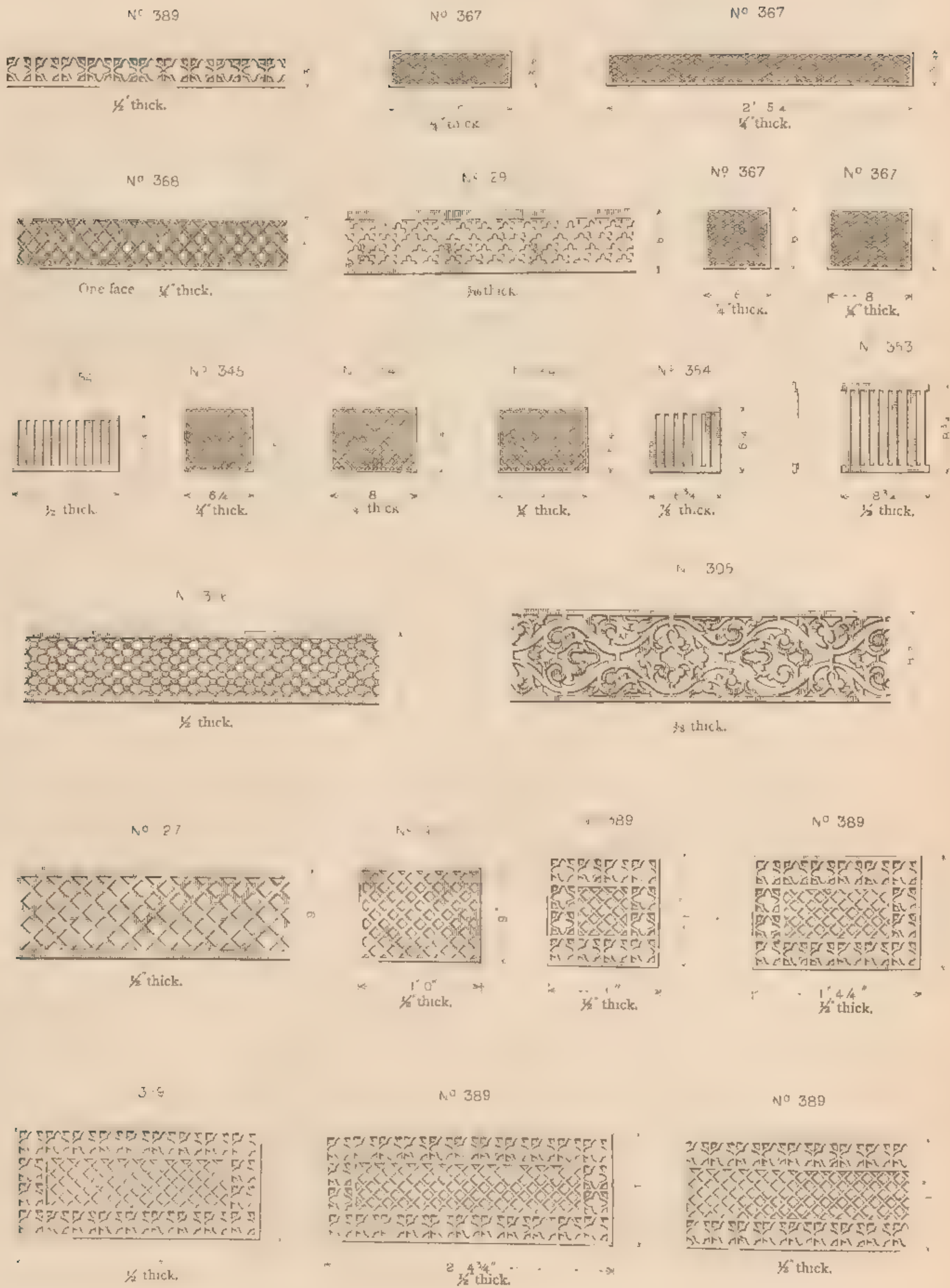


MACFARLANE'S VENTILATORS

WITH MOVABLE BLIND PAGES

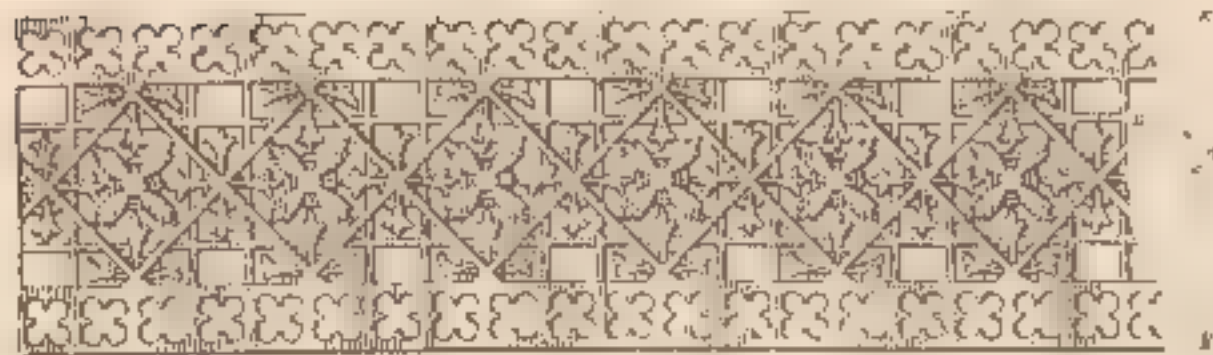
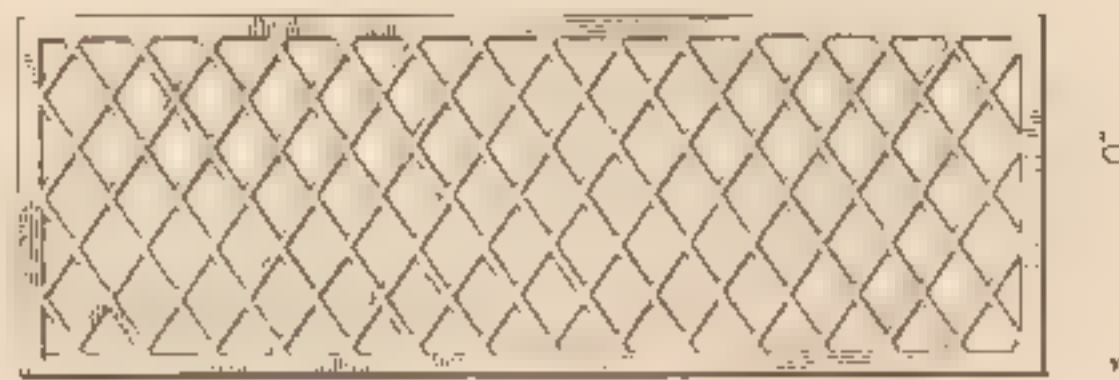
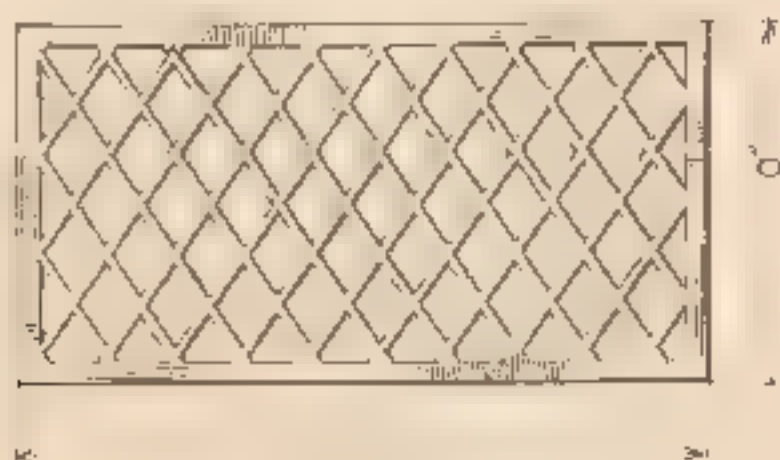
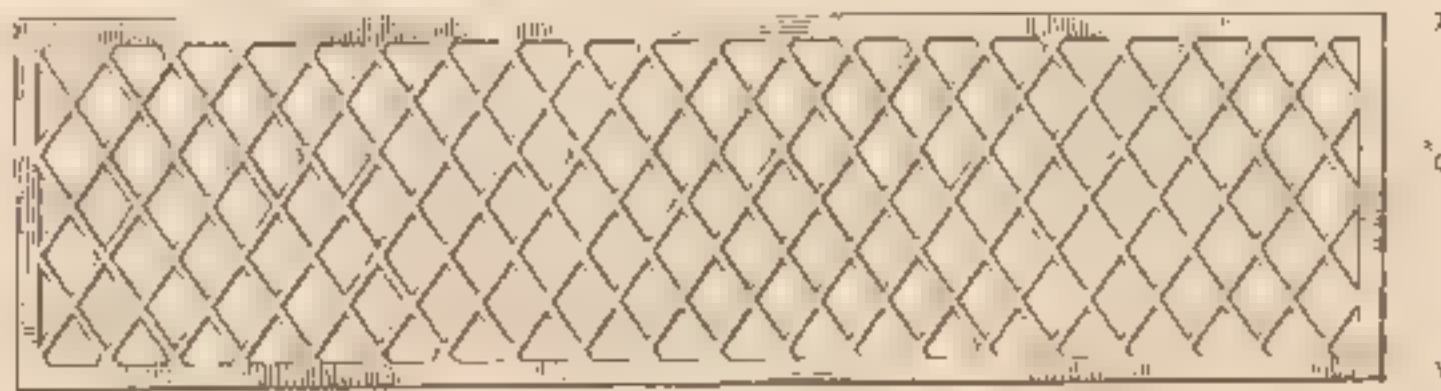
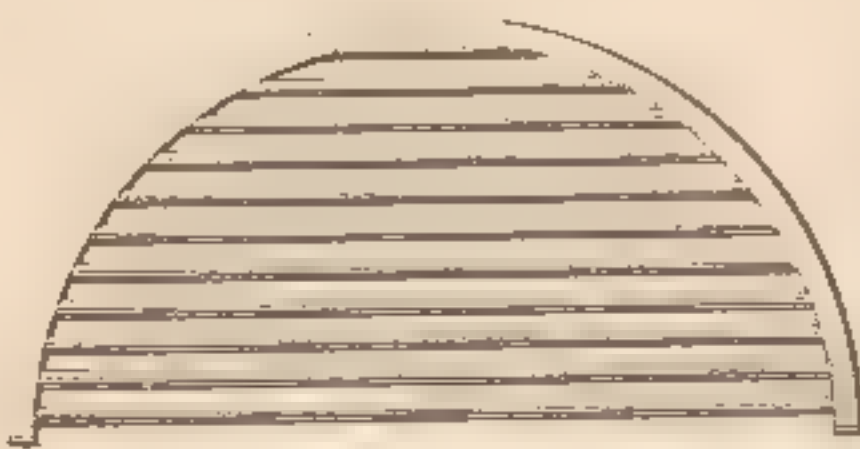
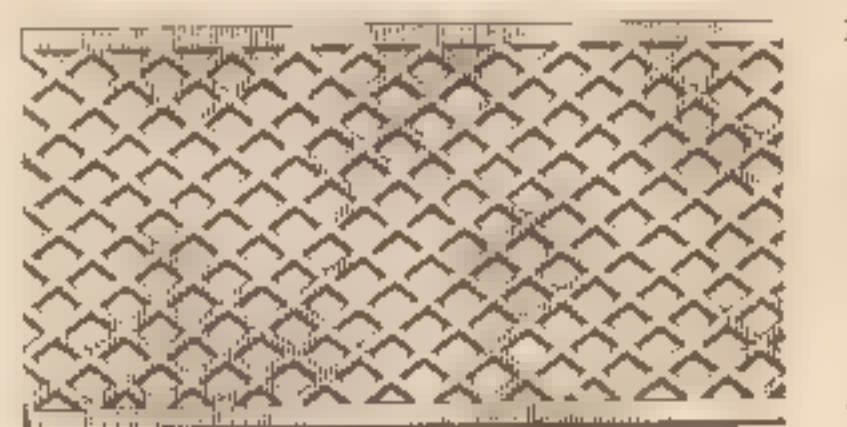
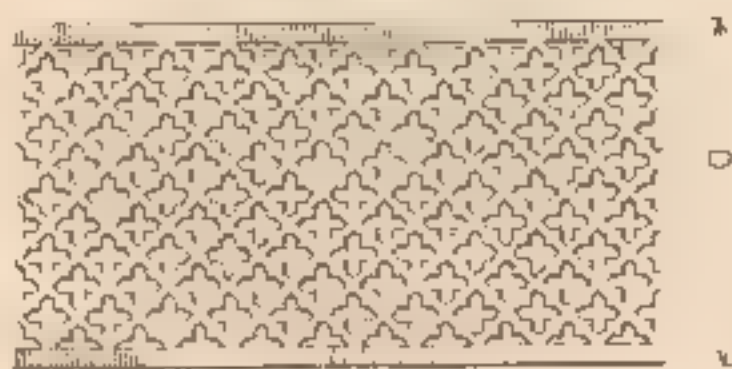
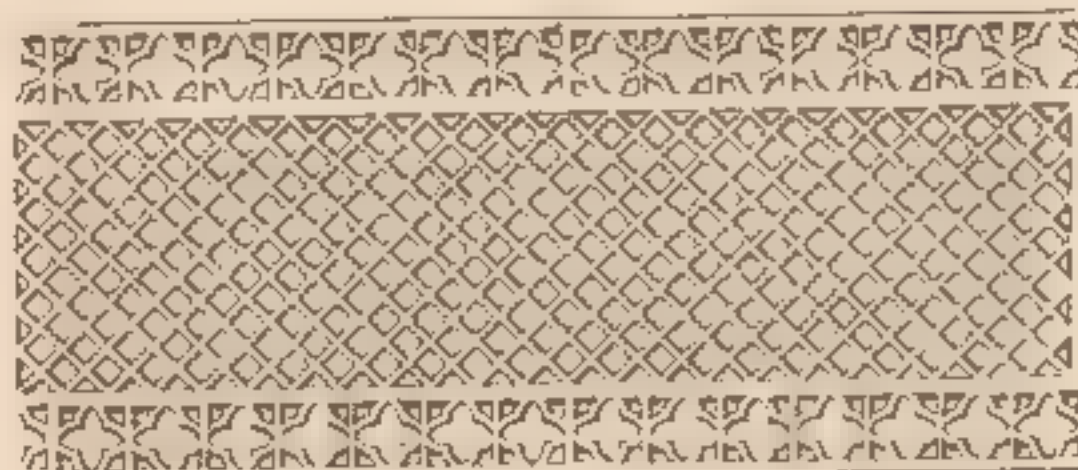
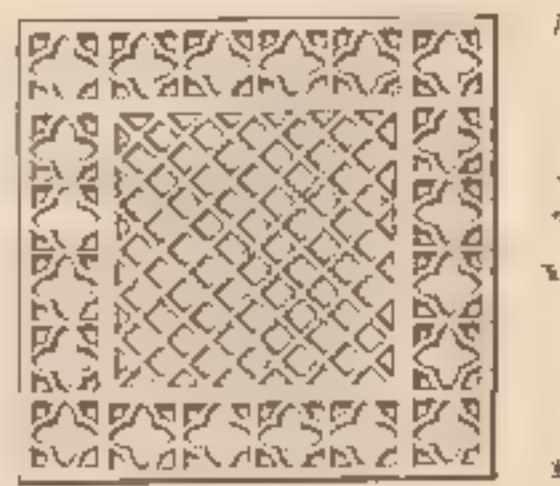


MACFARLANE'S GRATINGS



SCALE 1 INCH = FOOT

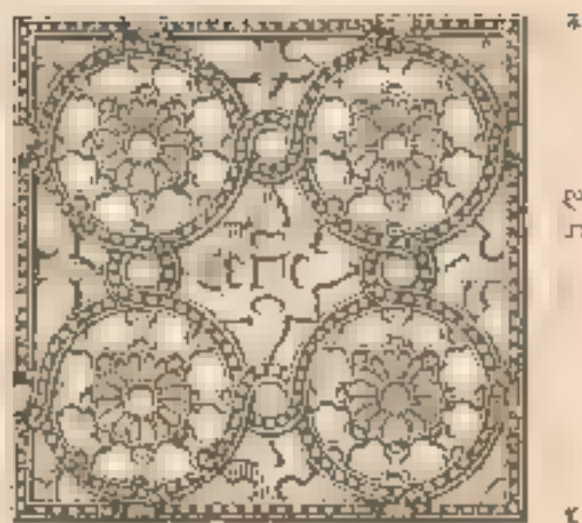
MACFARLANE'S GRATINGS

N^o 228 $\frac{1}{2}$ " thick. One face.N^o 228 $\frac{1}{2}$ " thick. One face.N^o 47 $\frac{3}{8}$ " thick.N^o 431 $\frac{2}{3}$ " thick.N^o 431 $\frac{3}{4}$ " thick.N^o 433' 0 1/4
 $\frac{3}{4}$ " thick.N^o 3502' 5"
1" thick. One face.N^o 34 $\frac{3}{8}$ " thick.N^o 297 $\frac{5}{16}$ " thick.N^o 287 $\frac{3}{8}$ " thick.N^o 389 $\frac{1}{2}$ " thick.N^o 389 $\frac{1}{2}$ " thick.

SCALE | INCH — | FOOT

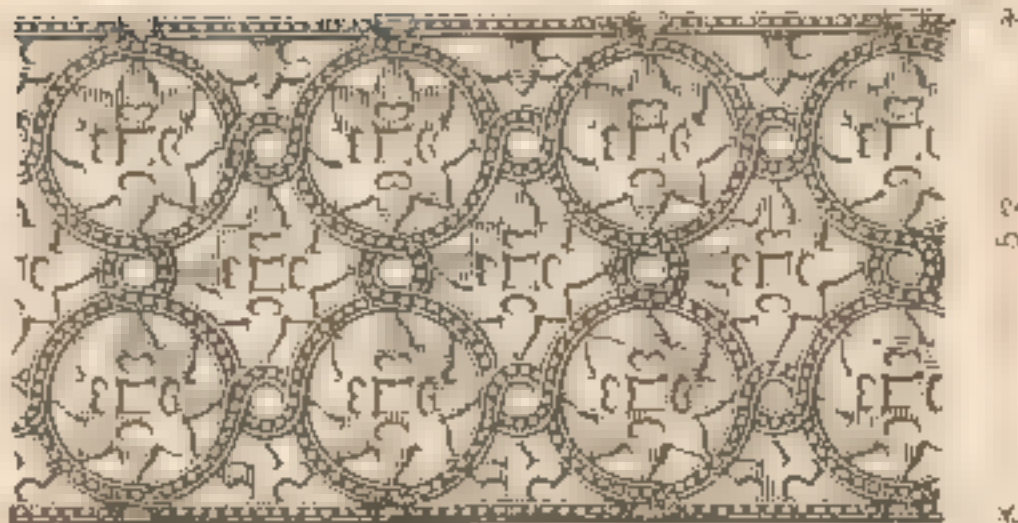
MACFARLANE'S GRATINGS

Nº 29



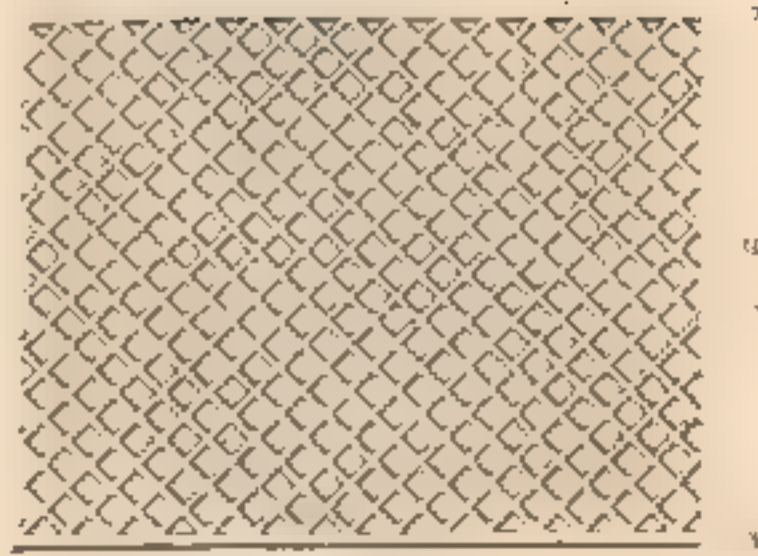
$\frac{3}{8}$ thick. One face

Nº 438



$\frac{3}{8}$ thick. One face

Nº 389



$\frac{1}{2}$ thick.

Nº 305



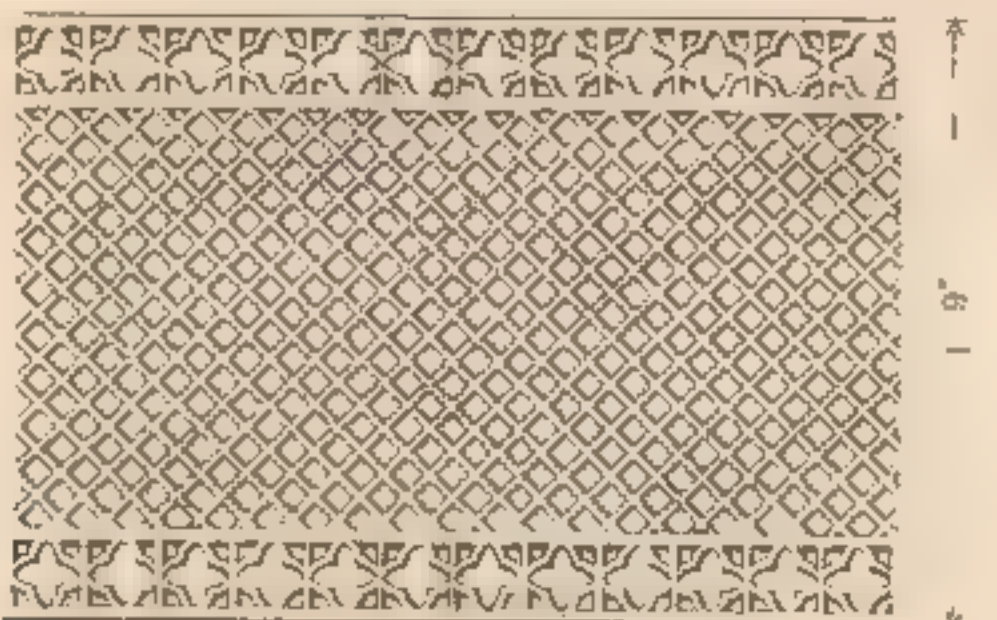
$\frac{3}{8}$ thick.

Nº 417



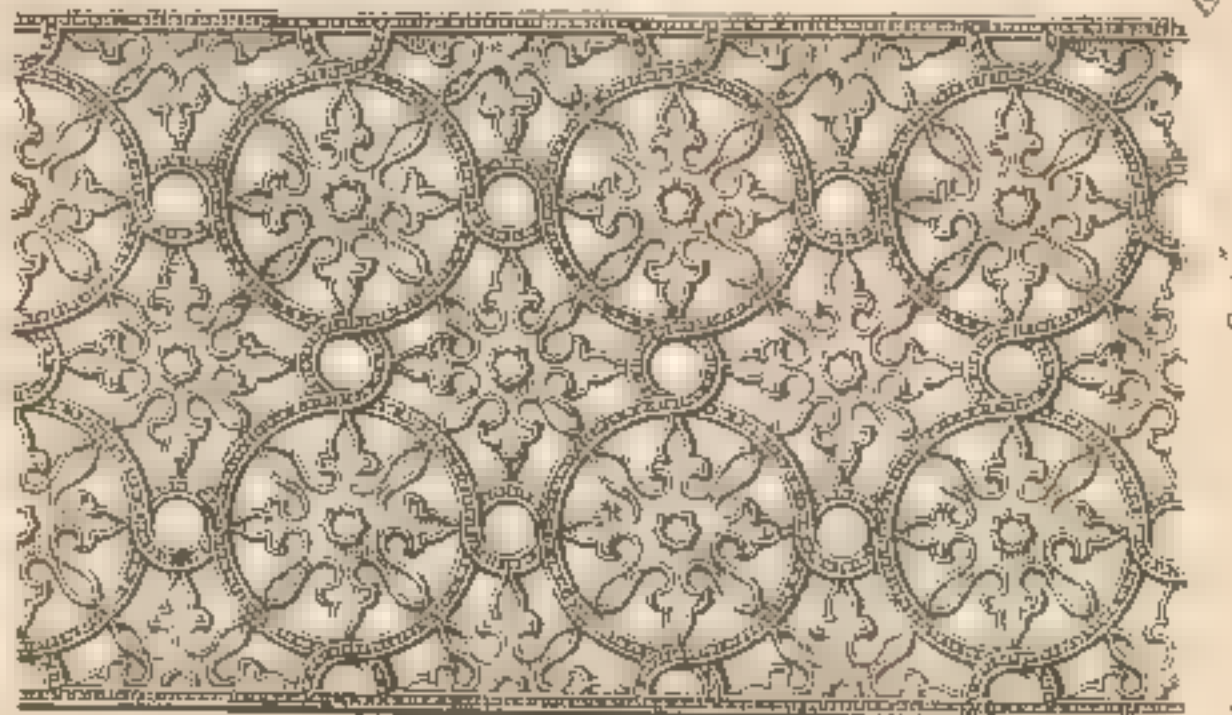
$\frac{3}{8}$ thick.

Nº 389



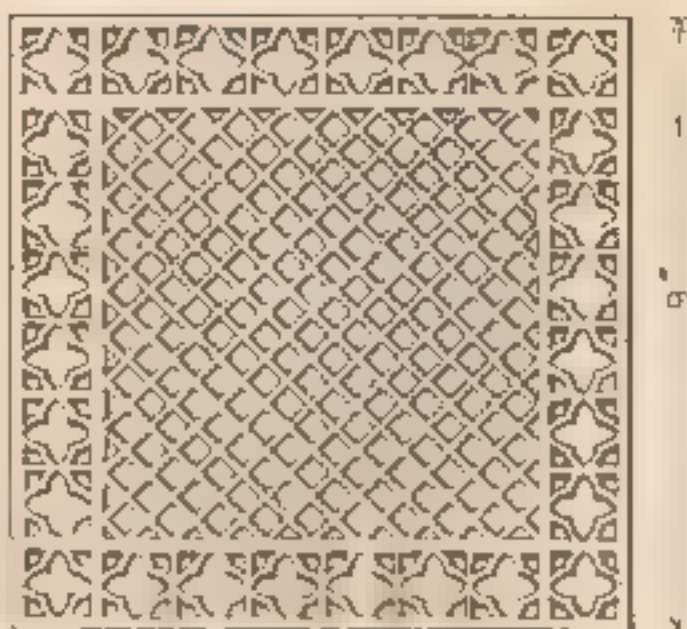
$\frac{1}{4}$ thick.

Nº 164



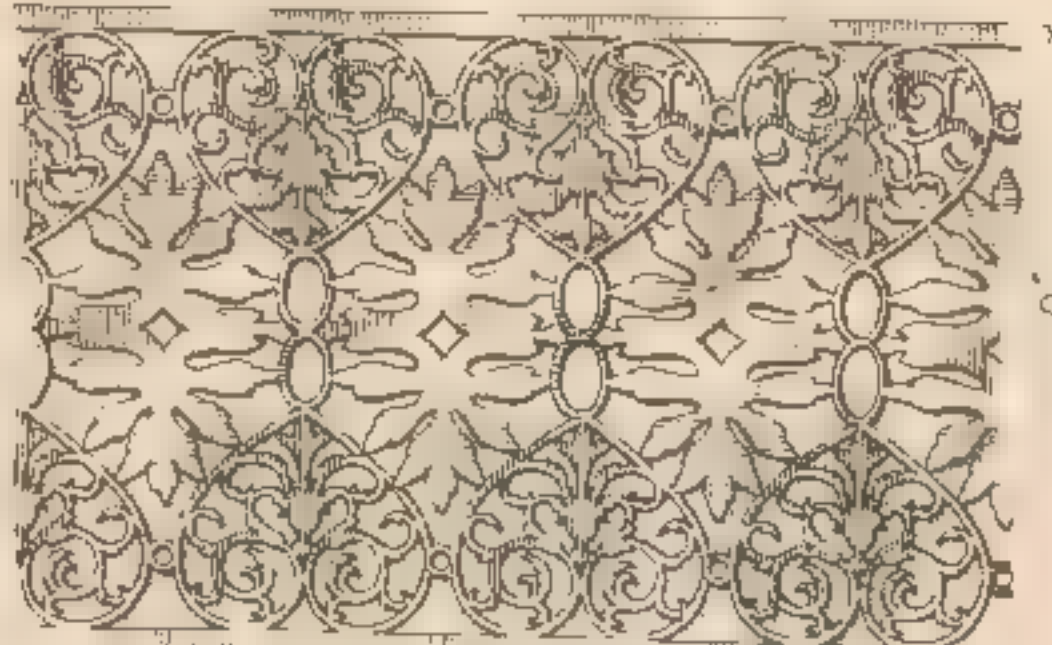
$\frac{3}{8}$ thick. One face.
Any size to order.

Nº 389



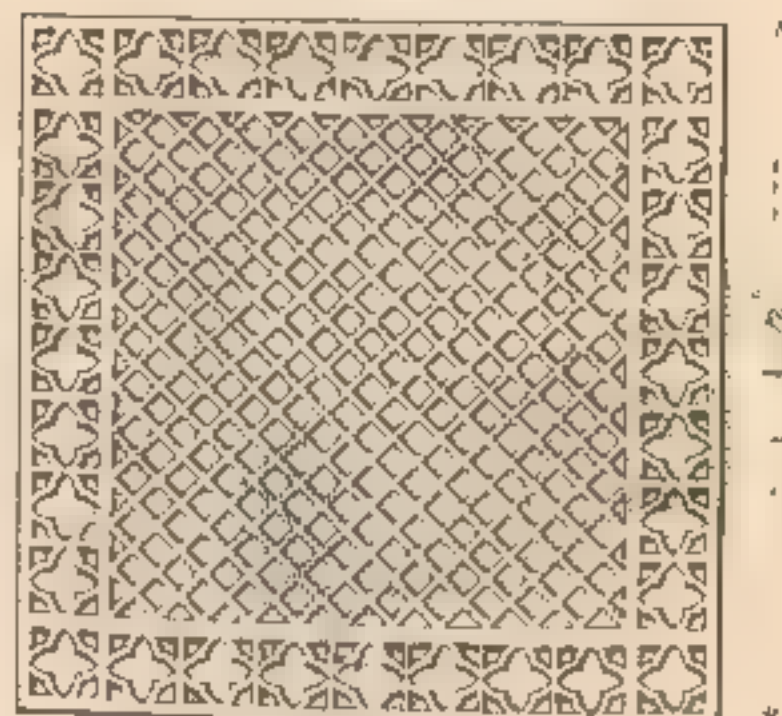
$\frac{1}{4}$ thick.

Nº 47



$\frac{3}{8}$ thick.

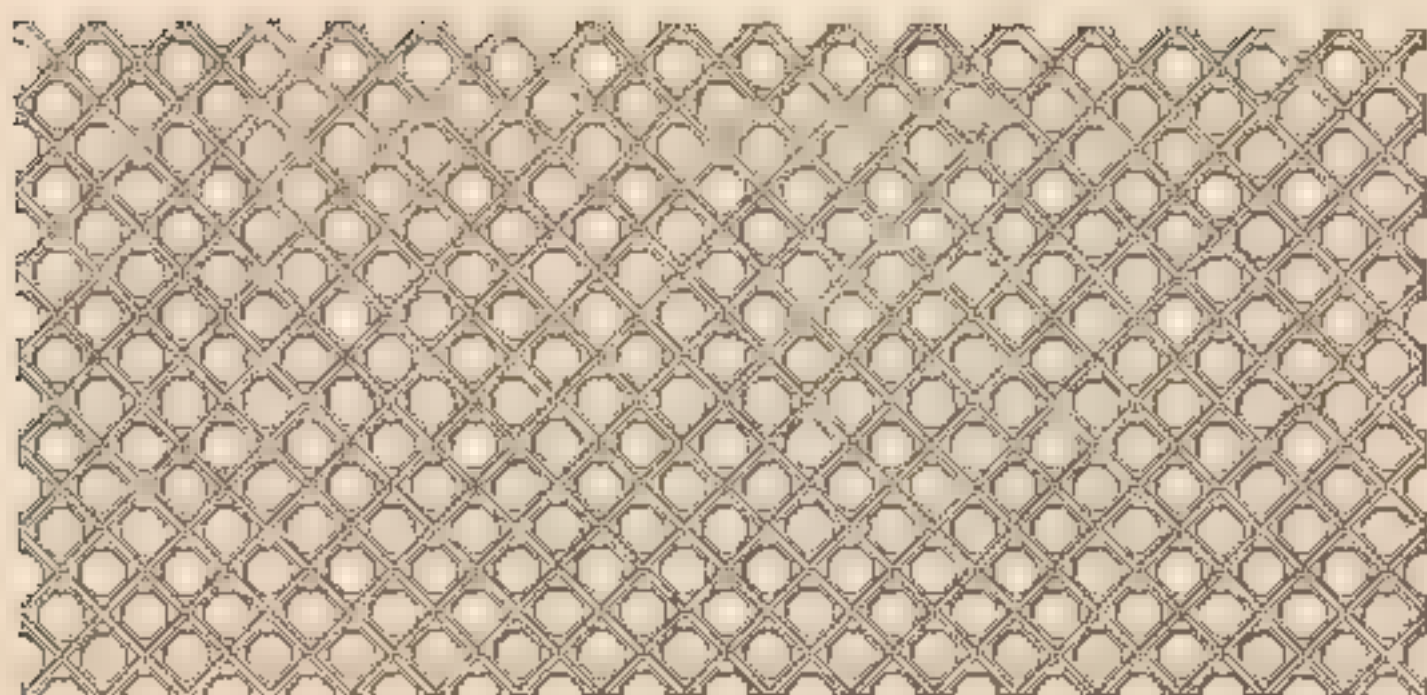
Nº 389



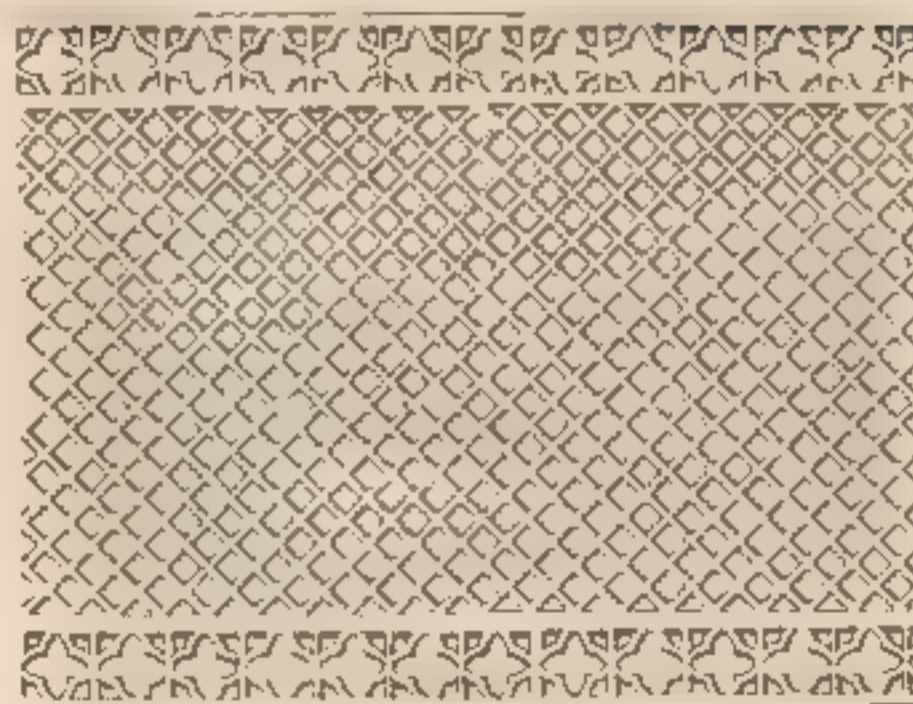
$\frac{1}{2}$ thick

SCALE 1 INCH = FOOT

MACFARLANE'S GRATINGS

N^o 423

3' 11" -----
 $\frac{1}{8}$ " thick. One face.

N^o 389

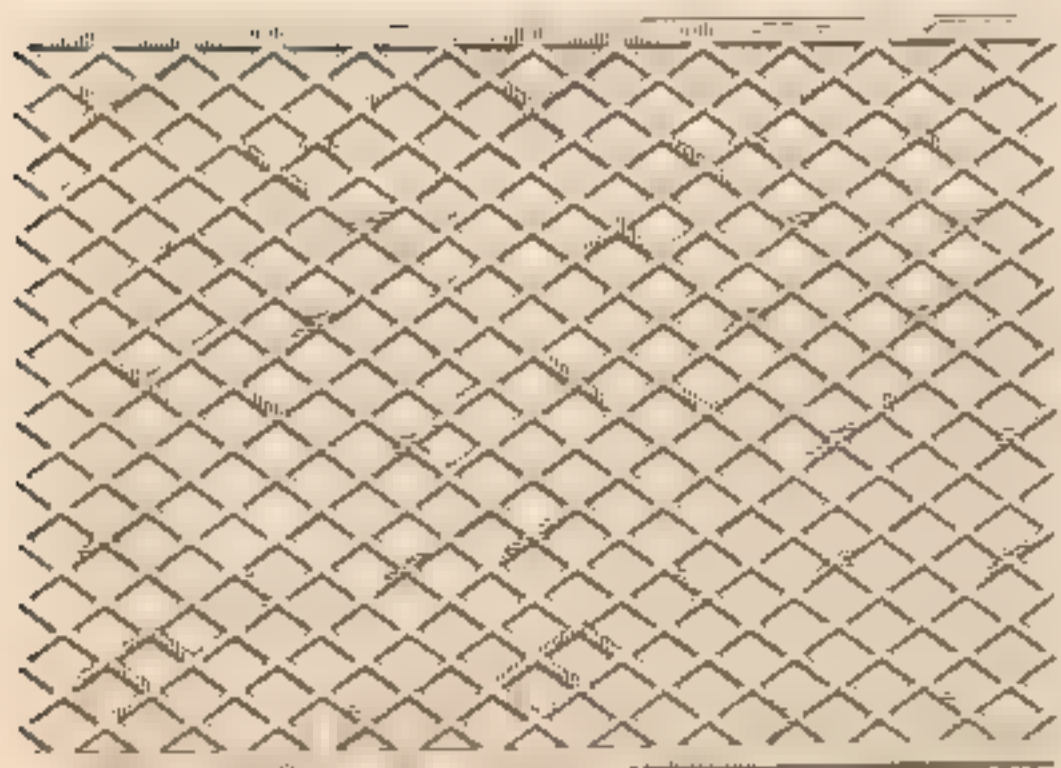
$\frac{1}{8}$ " thick.

N^o 305

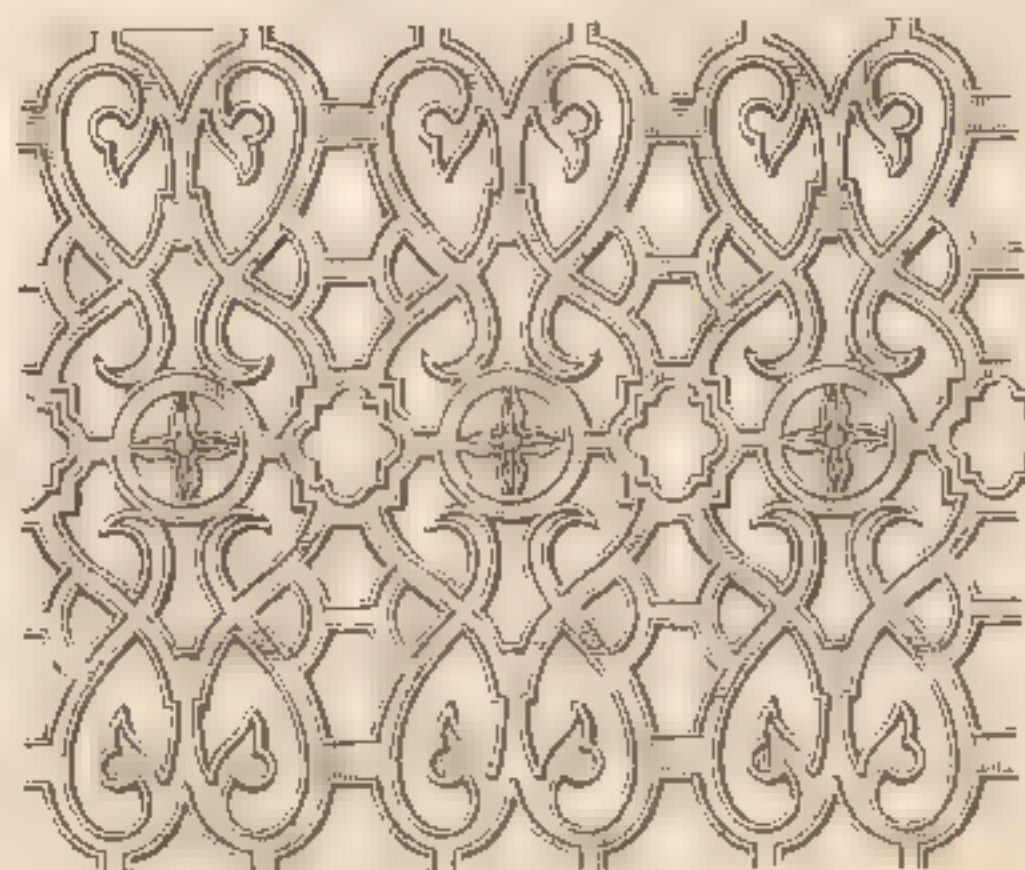
$\frac{1}{8}$ " thick.

N^o 432

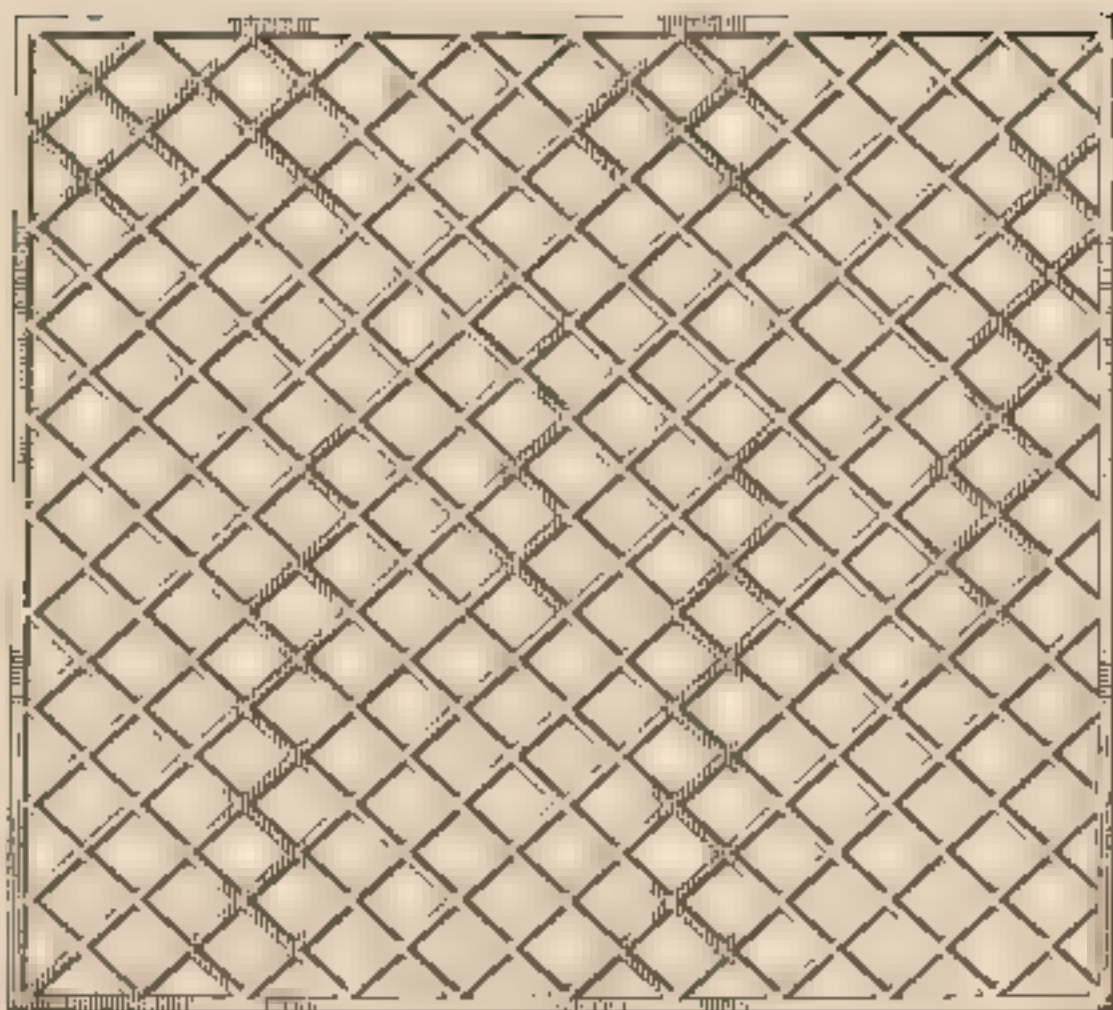
$\frac{1}{8}$ " thick. One face

N^o 355

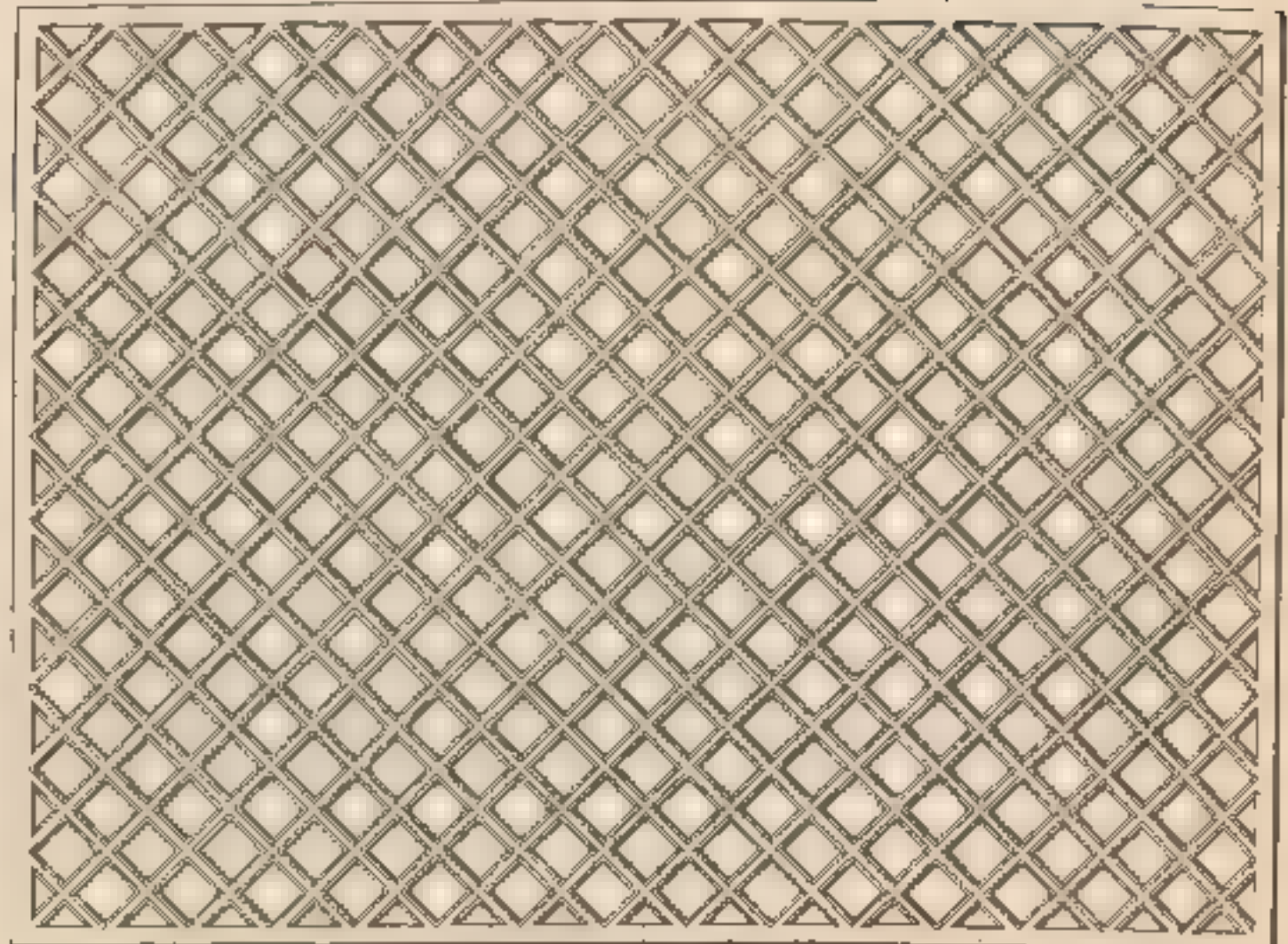
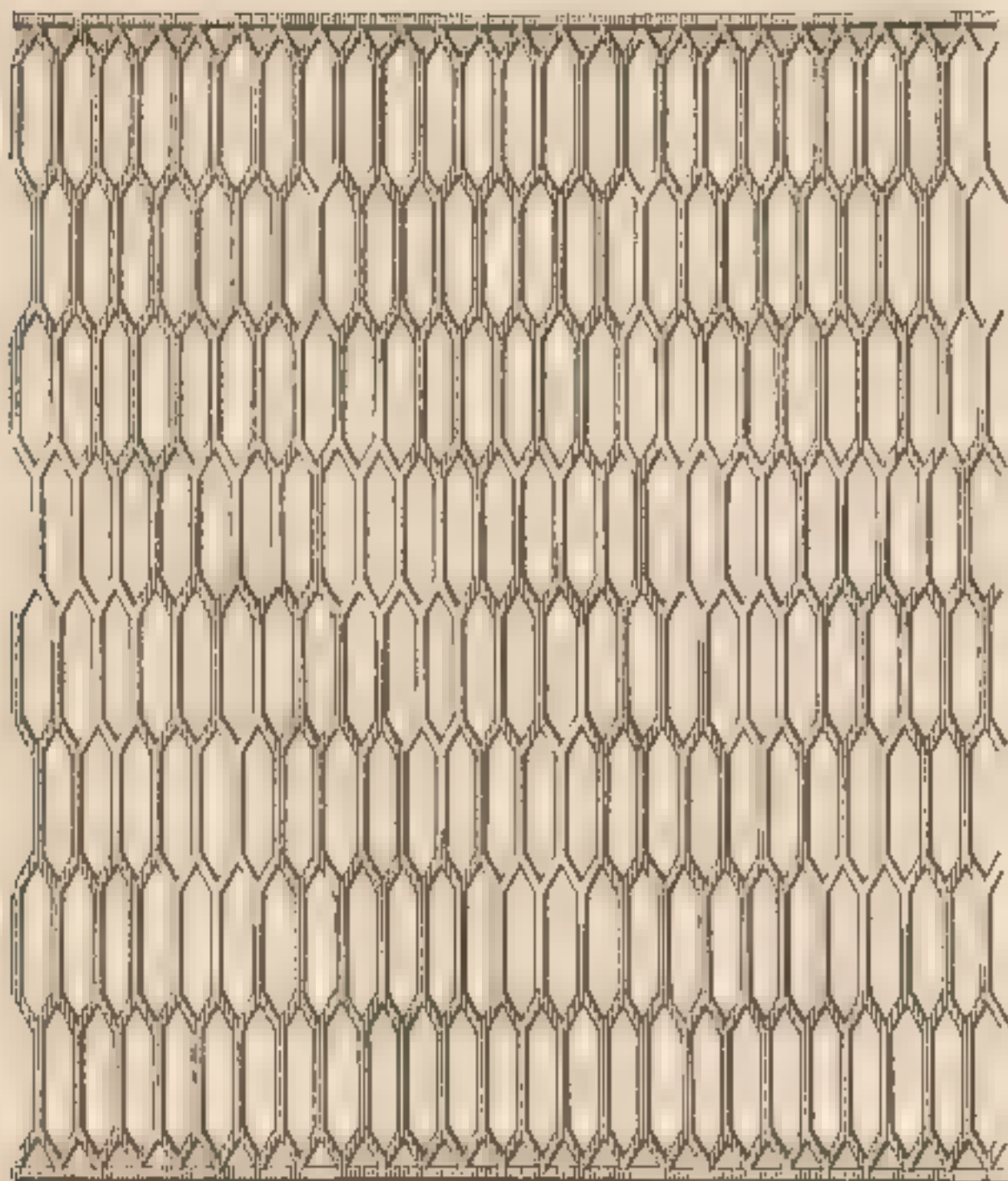
$\frac{1}{8}$ " thick.

N^o 329

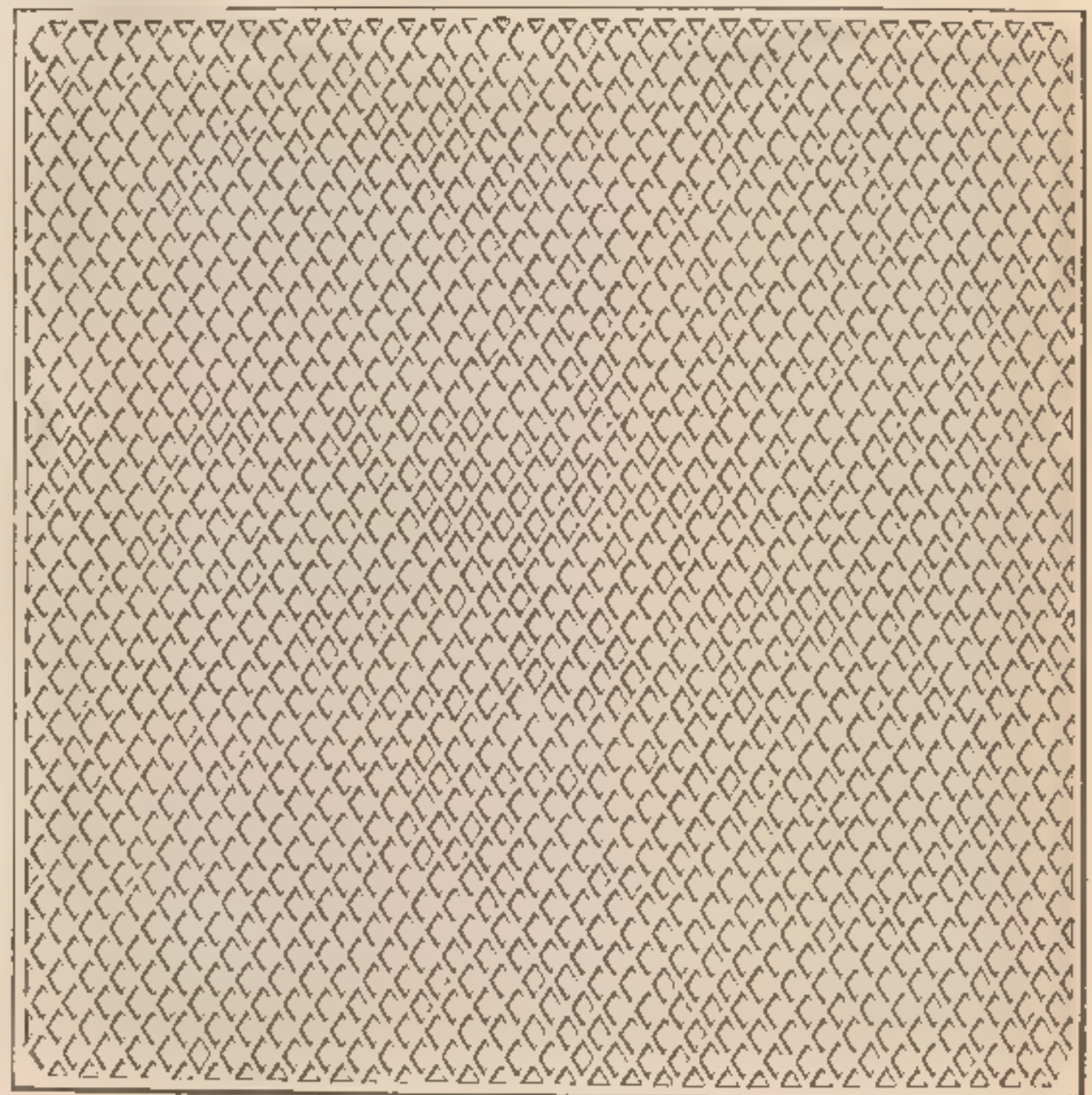
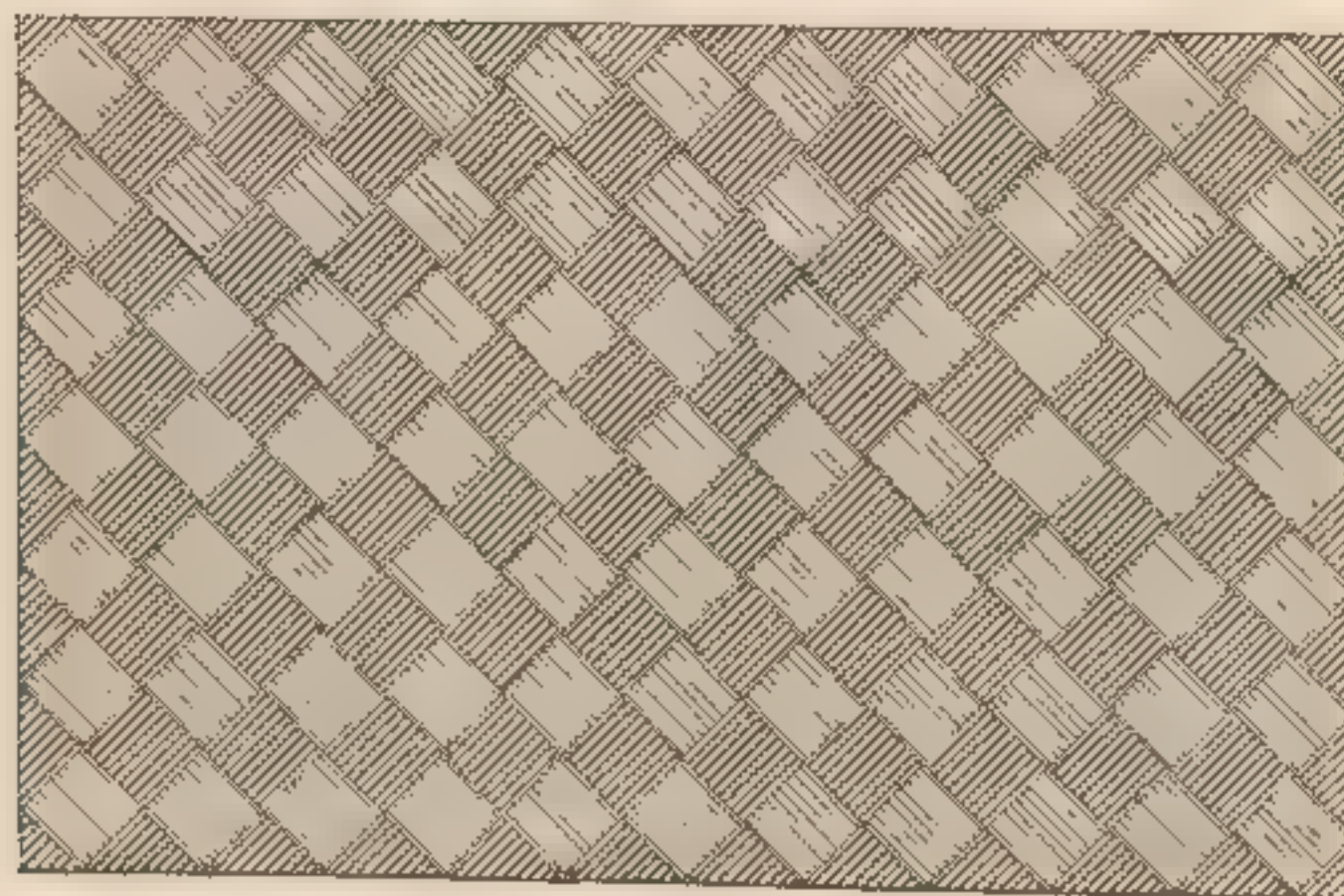
1" thick. One face

N^o 286

1" thick.

N^o 235 $\frac{3}{4}$ " thick. One face.N^o 346N^o 362

1" thick.

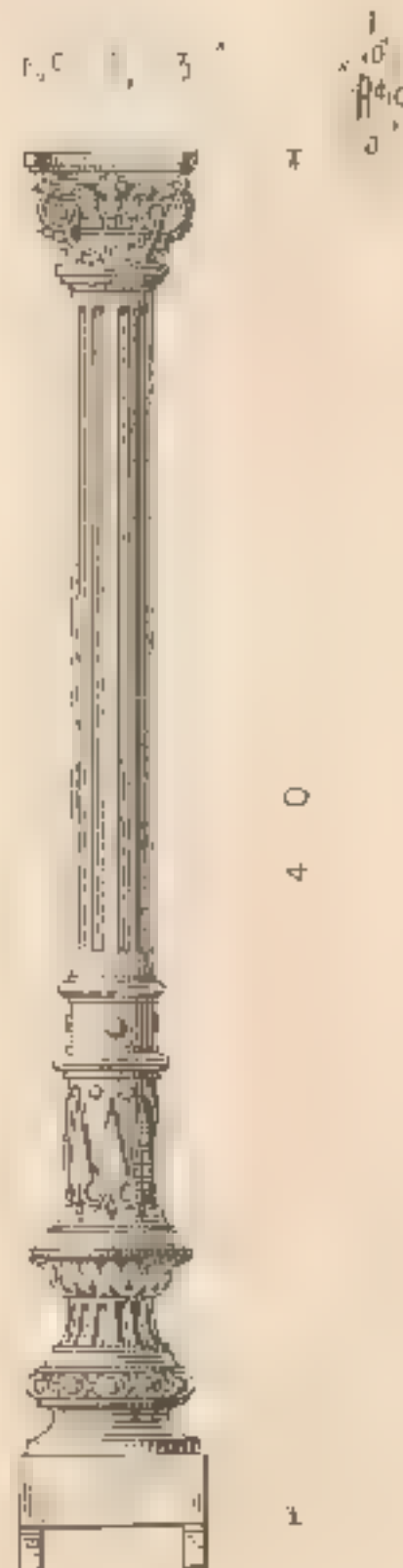
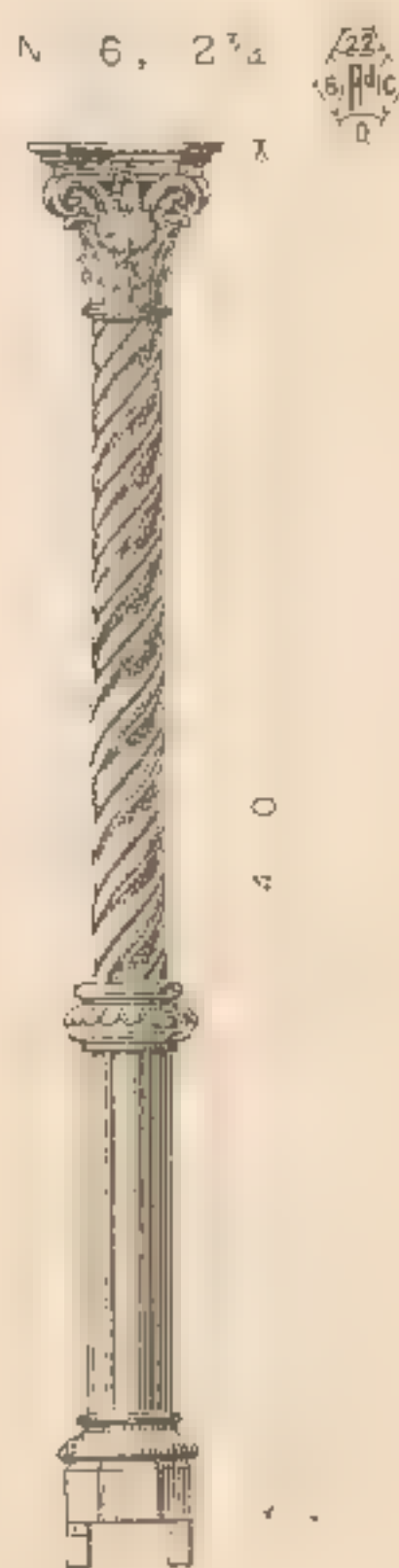
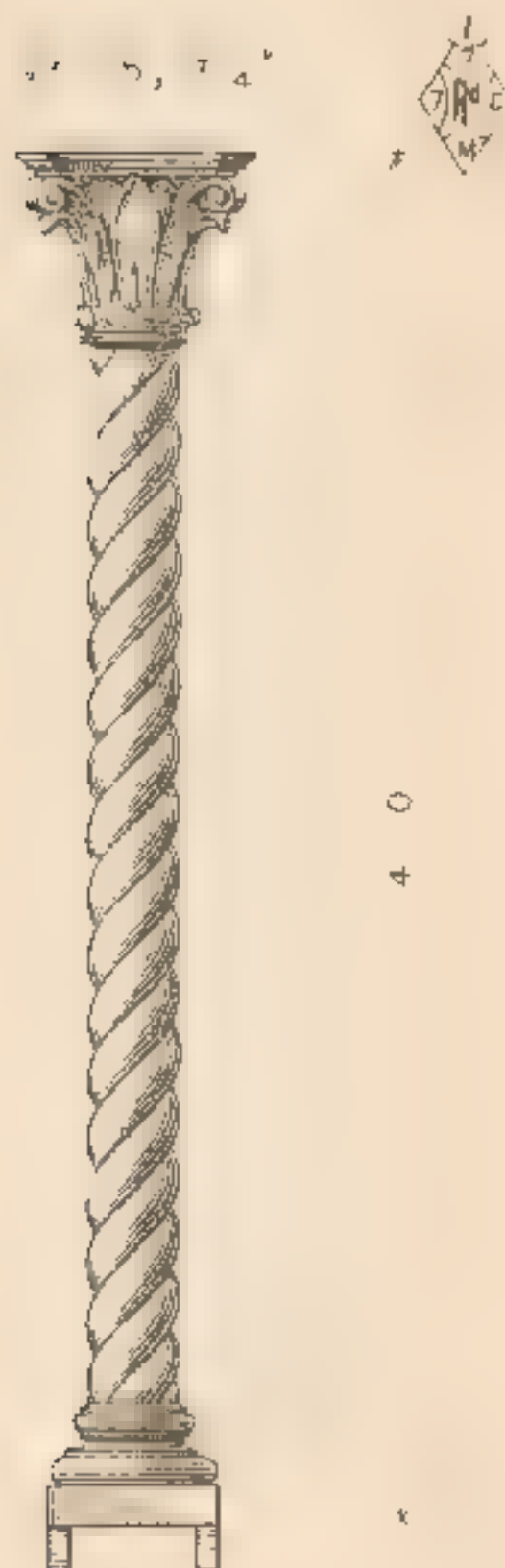
 $\frac{3}{4}$ " thick. Other sizes to order.N^o 234 FLOP PLATE $\frac{3}{4}$ " thick. Other sizes to order.

SCALE | NOM — | FOOT

SECTION VII.

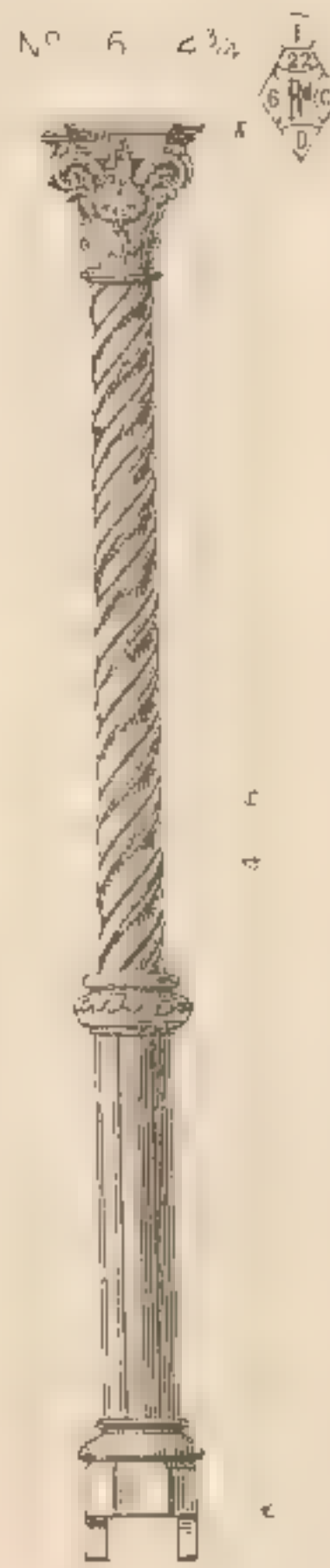
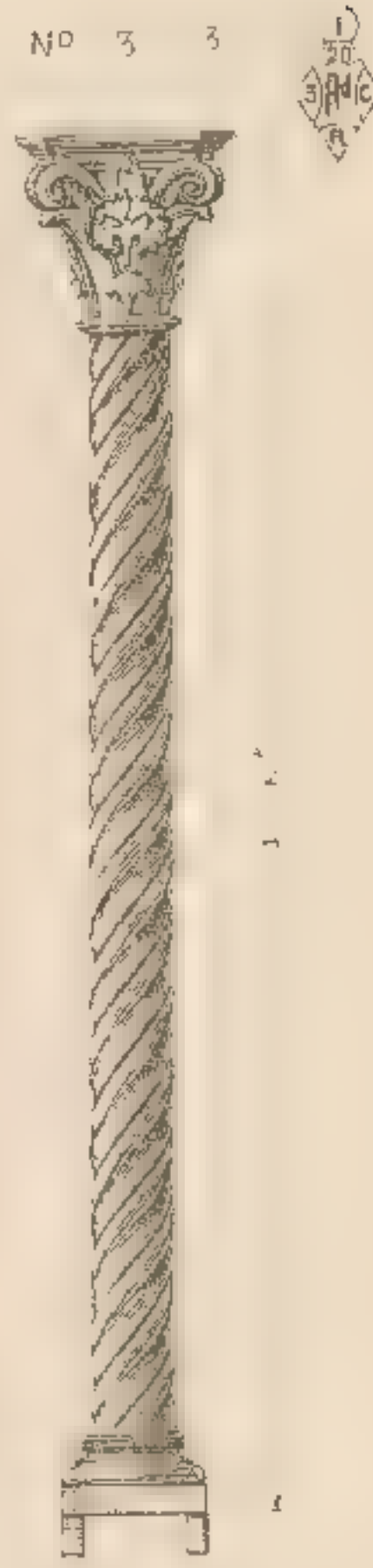
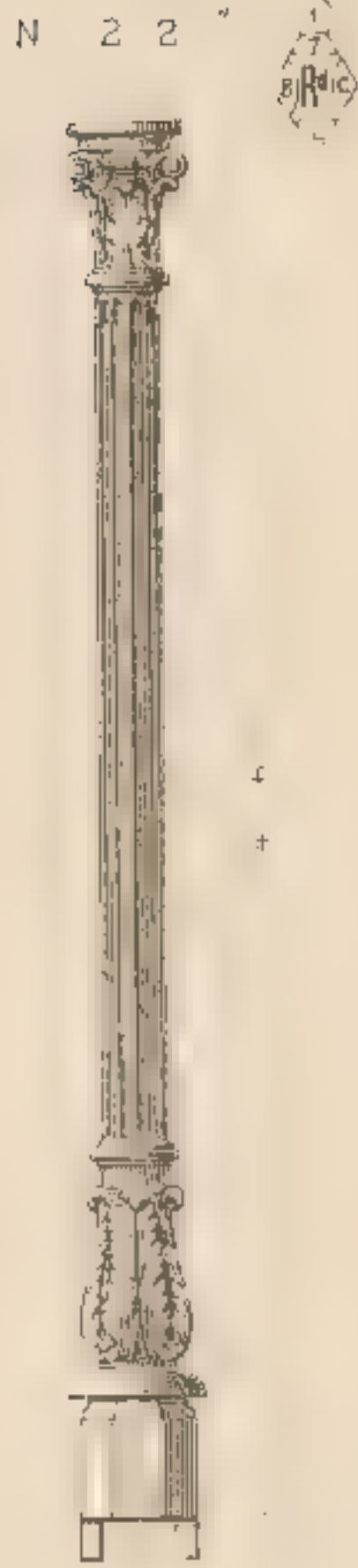
COLUMNS, BRACKETS, AND SPANDRILS.

MACFARLANE'S COLUMNS



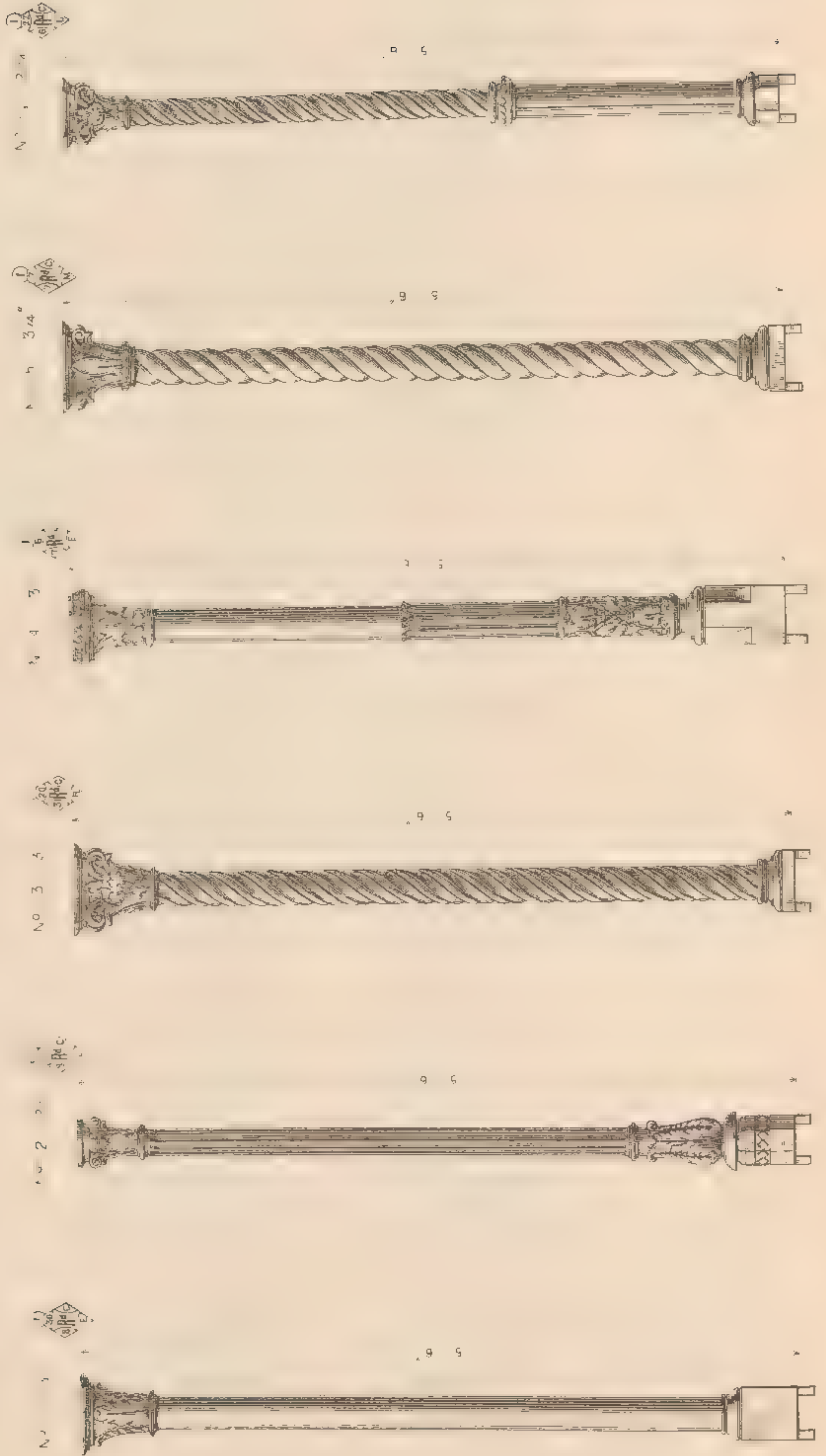
SCALE 1 INCH = 1 FOOT

MACFARLANE'S COLUMNS

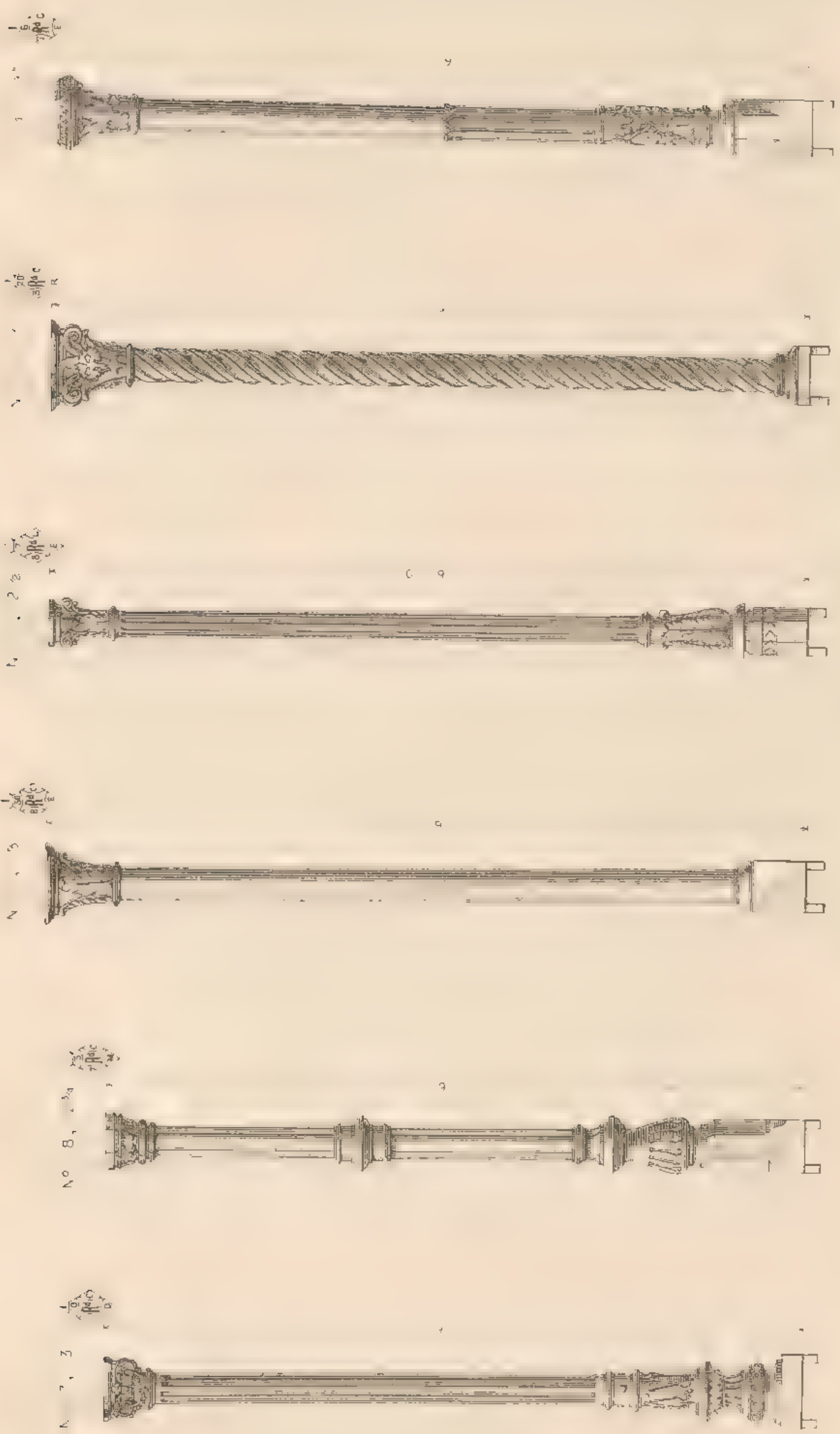


SCALE 1 INCH = 1 FOOT

MACIARLANE'S COLUMNS



MANUFACTURED BY M. S.



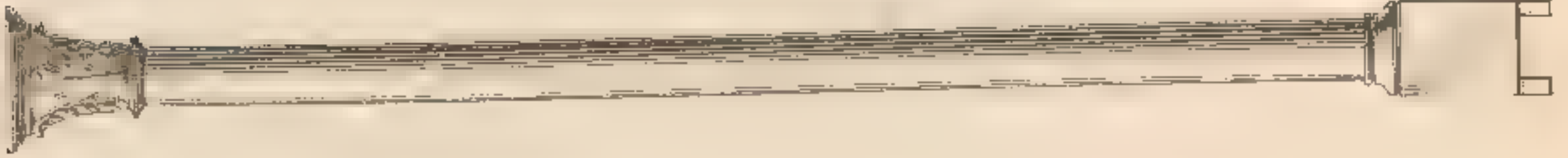
SCALE 1 INCH = 1 FOOT

MACFARLANE'S COLUMNS

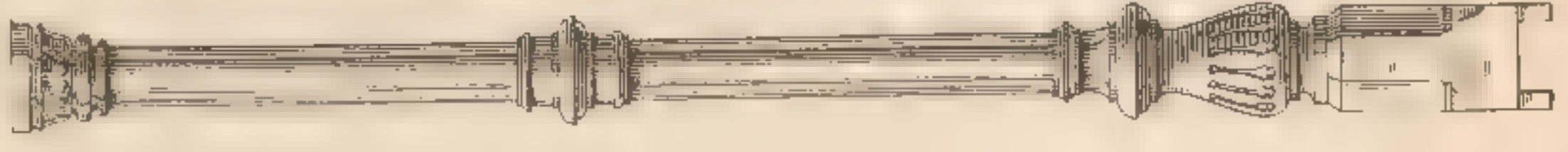
N^o 2. 2.
 $\frac{1}{2}$ 1 1 1
 1 1 1



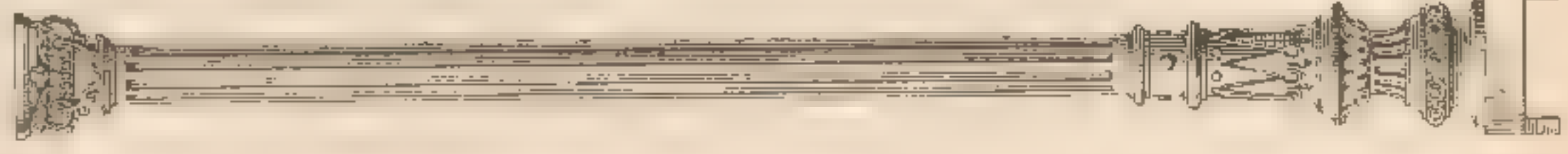
N^o 3



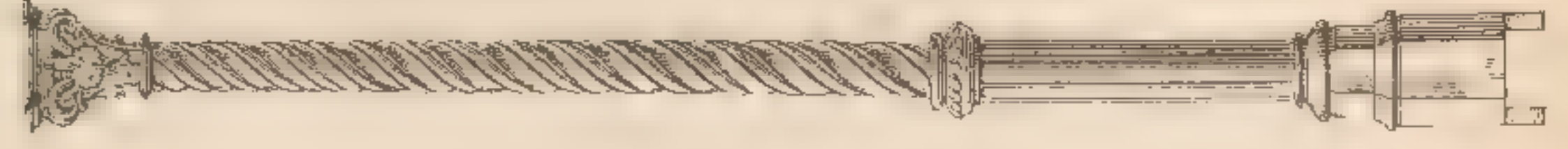
N^o 8. 2 3/4
 1 1 1
 1 1 1



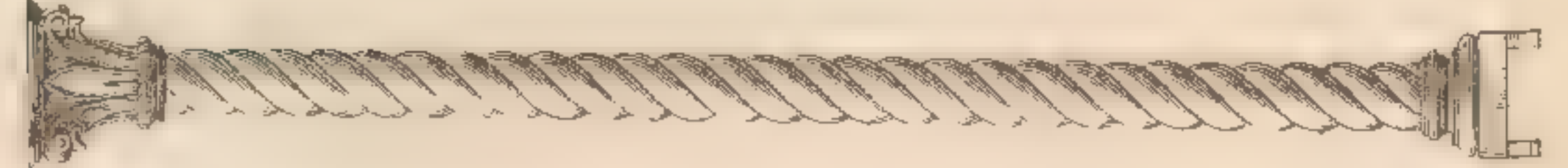
N^o 3
 1 1 1
 1 1 1



N^o 5. 2 3/4
 1 1 1
 1 1 1

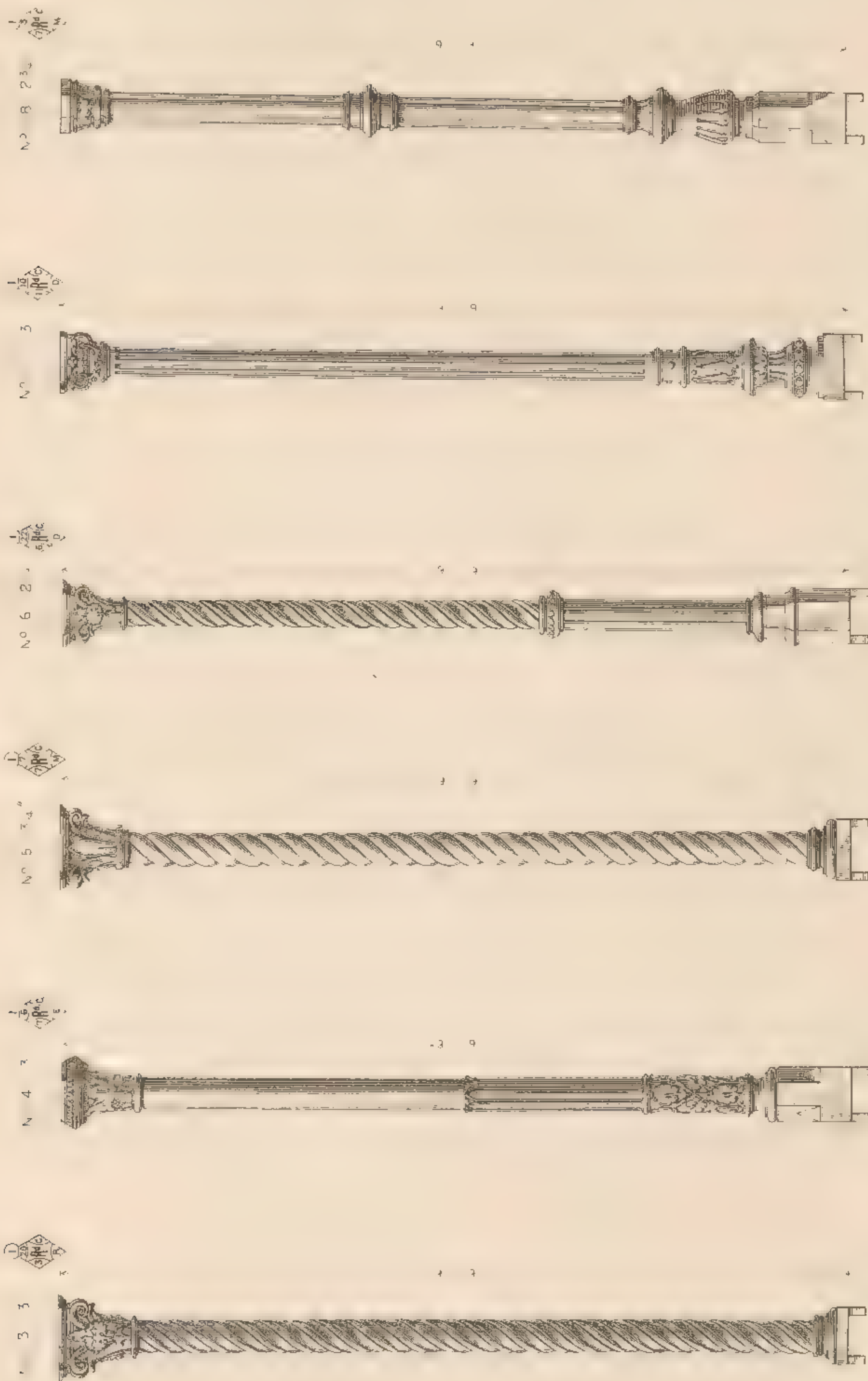


N^o 5.
 1 1 1
 1 1 1



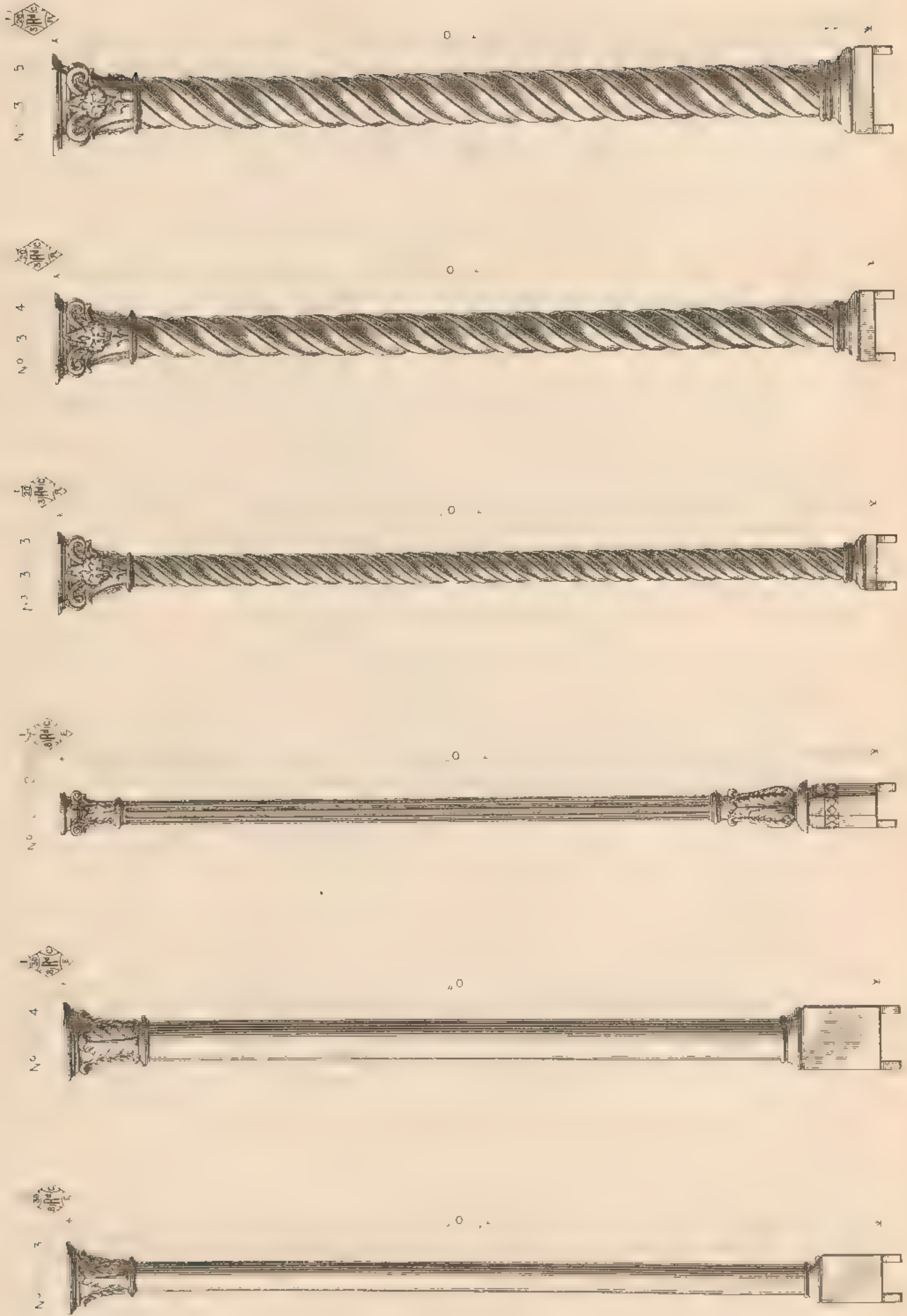
SCALE 1 INCH = FOOT

MACFARLANE'S COLUMNS



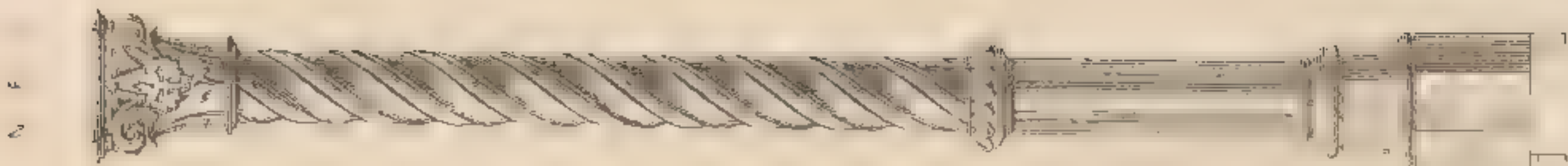
SCALE INCH = 1 FOOT

MACFARLANE'S COLUMNS

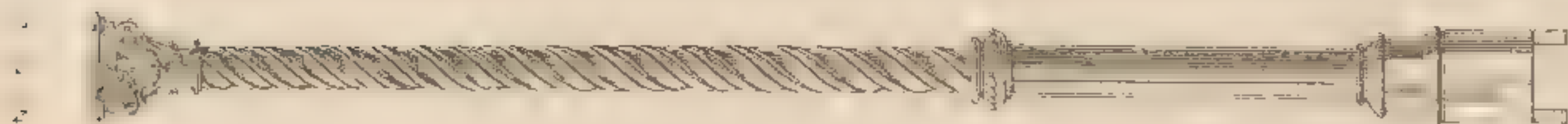


SCALE 1/4" = 1 FOOT

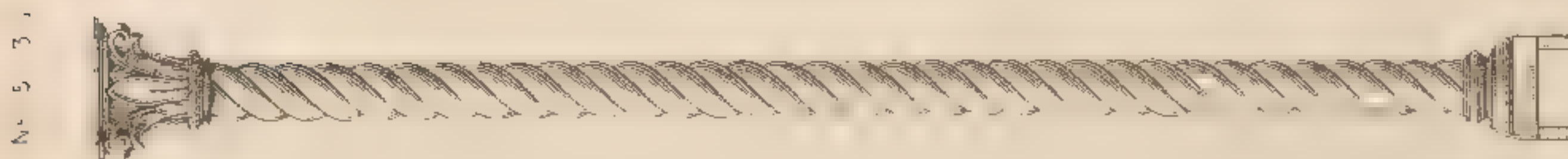
22.
6 1/2
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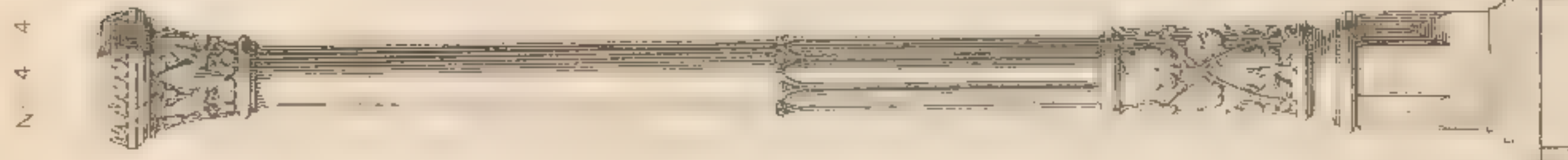
23.
6 1/2
L



1
6 1/2
L



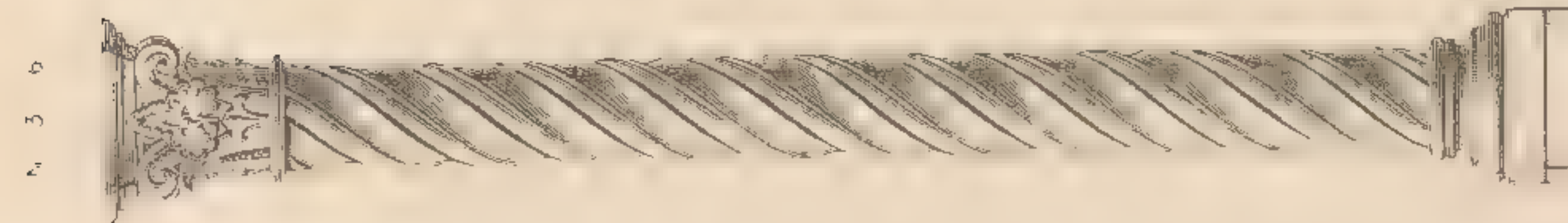
6
7 1/2
L



1
6 1/2
L

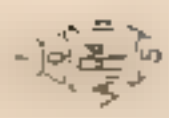


26.
3 1/2
R

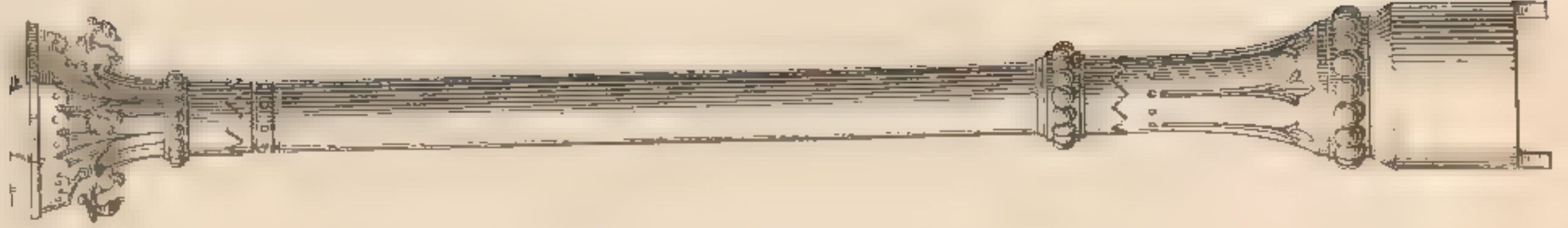


SCALE INCH 1 FOOT

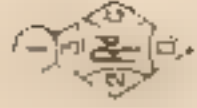
JACFARLANE'S COLUMNS



No. 3. 4



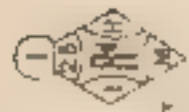
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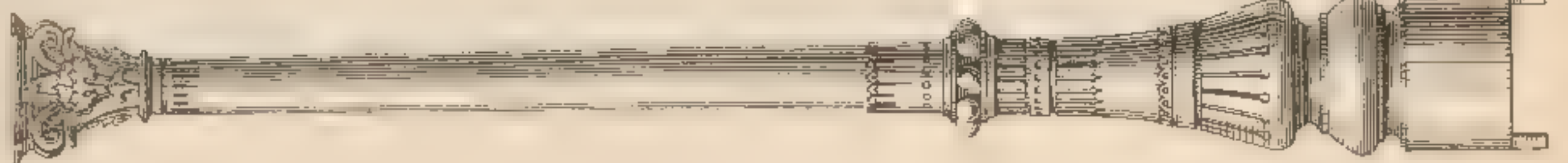
No. 2. 5



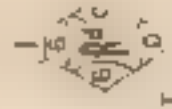
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No. 0. 5



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No. 3. 4

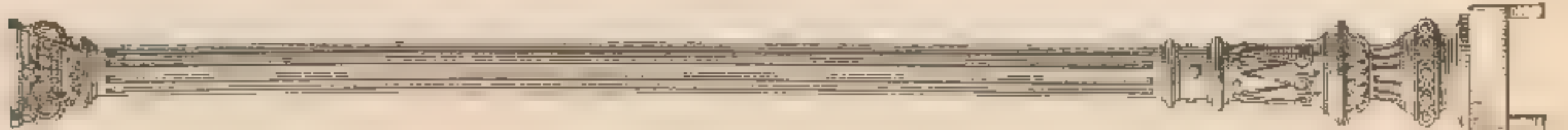
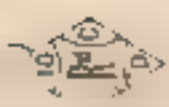


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No. 8. 3



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CLASSICAL ARCHITECTURE

Fig. 1
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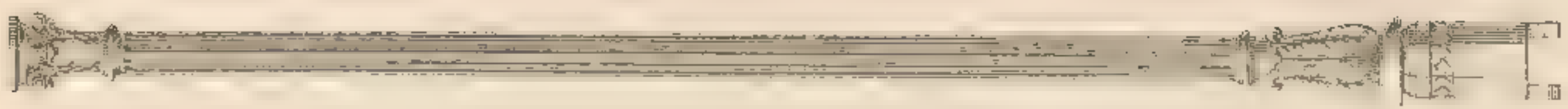


Fig. 2
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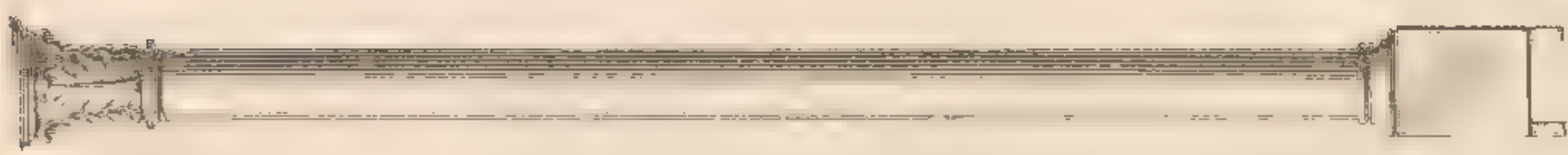


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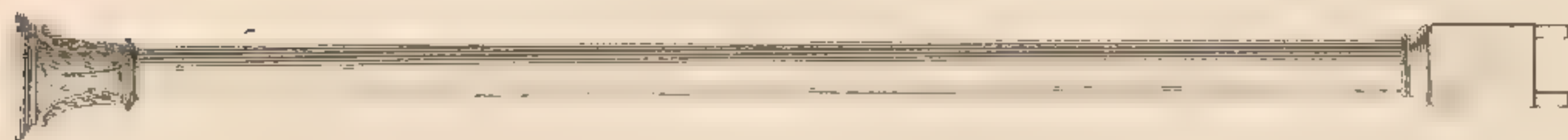


Fig. 4
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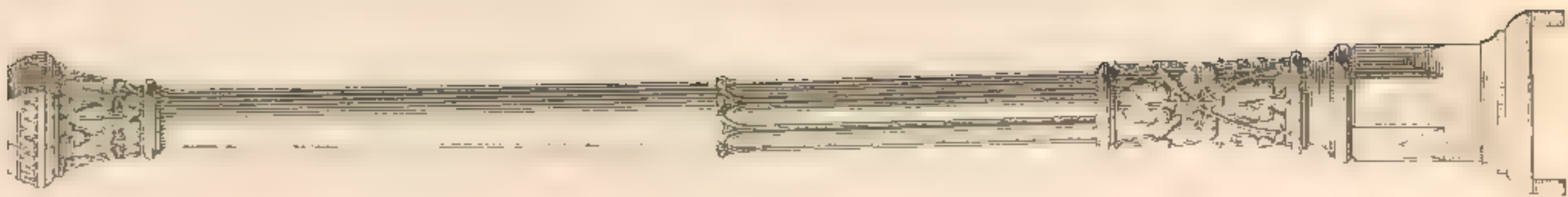
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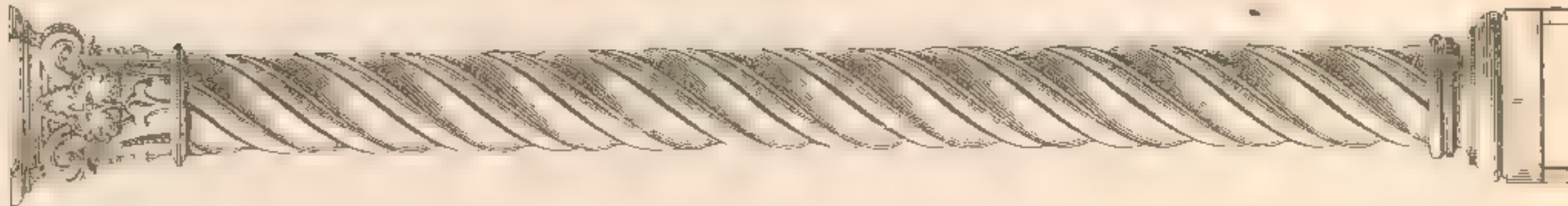
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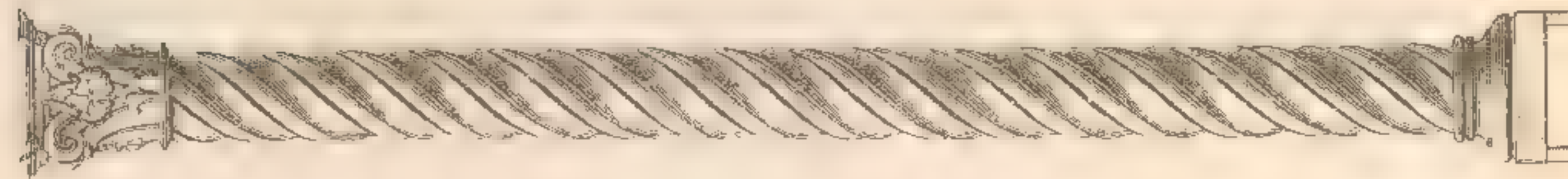
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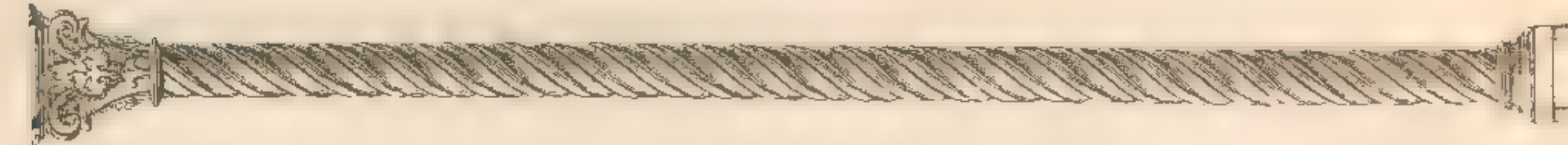
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MACFARLANE'S COLUMNS

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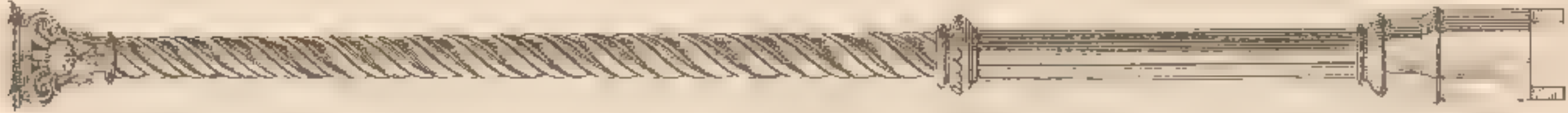
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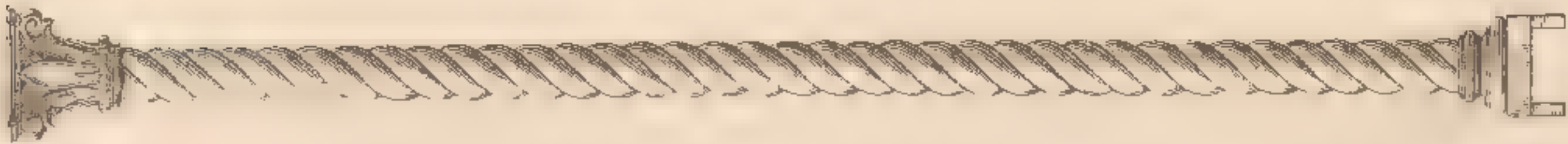
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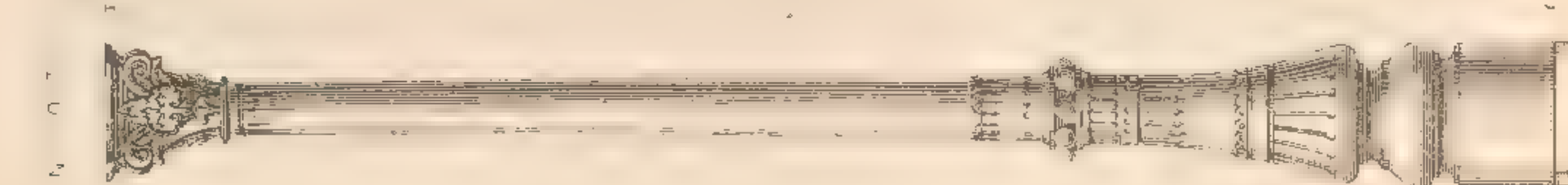
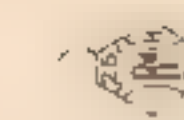
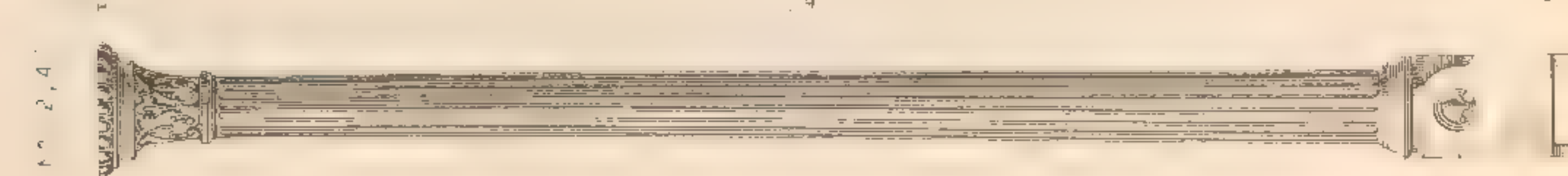
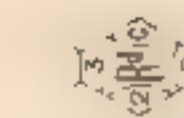
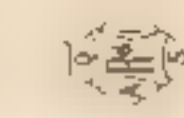
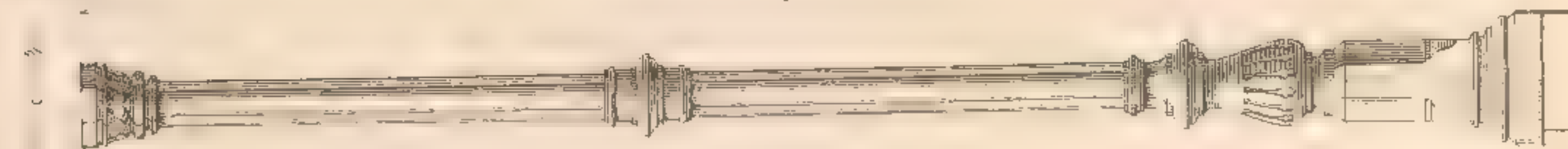
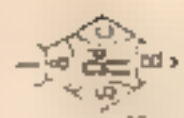
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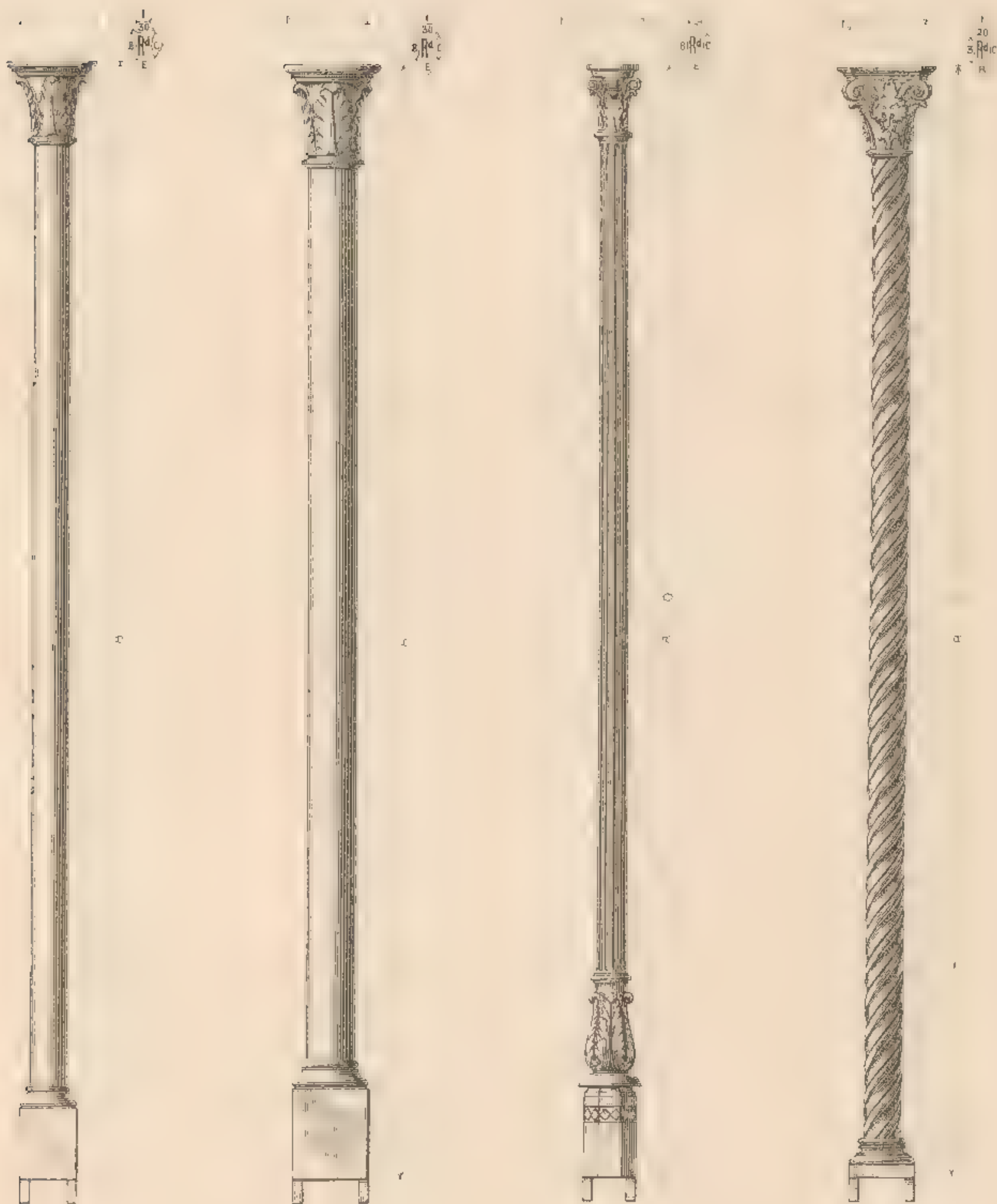


MAGFARLANE'S CO. N.Y.



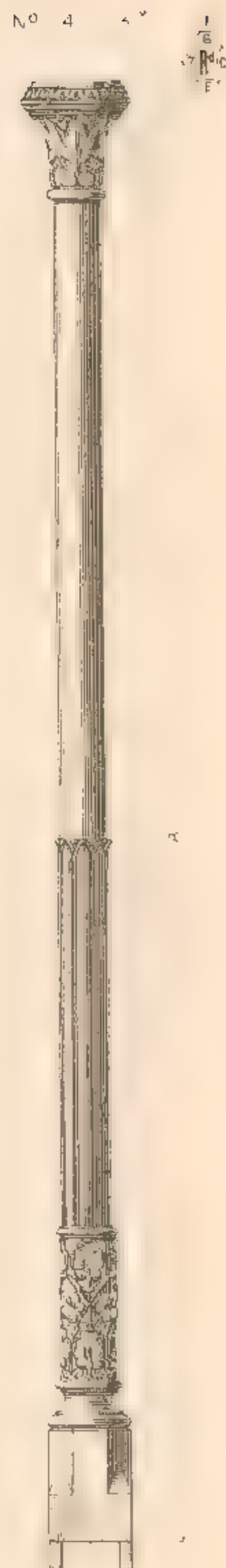
SCALE INCH — FOOT

MACFARLANE'S COLUMNS



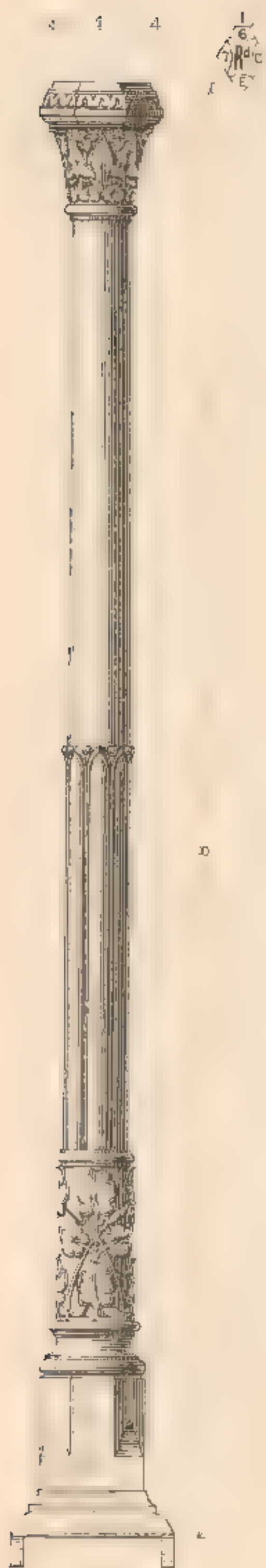
SCALE 1 INCH = 1 FOOT

MACFARLANE'S COLUMNS



SCALE IN FEET

MACFARLANE'S COLUMNS



SCALE 1/4" = 1 FOOT

MACFARLANE'S COLUMNS

No 7 3" $\frac{1}{8}$ "
R^c
D



No 8 3 1/2"



No 9 4" $\frac{1}{8}$ "
R^c
D

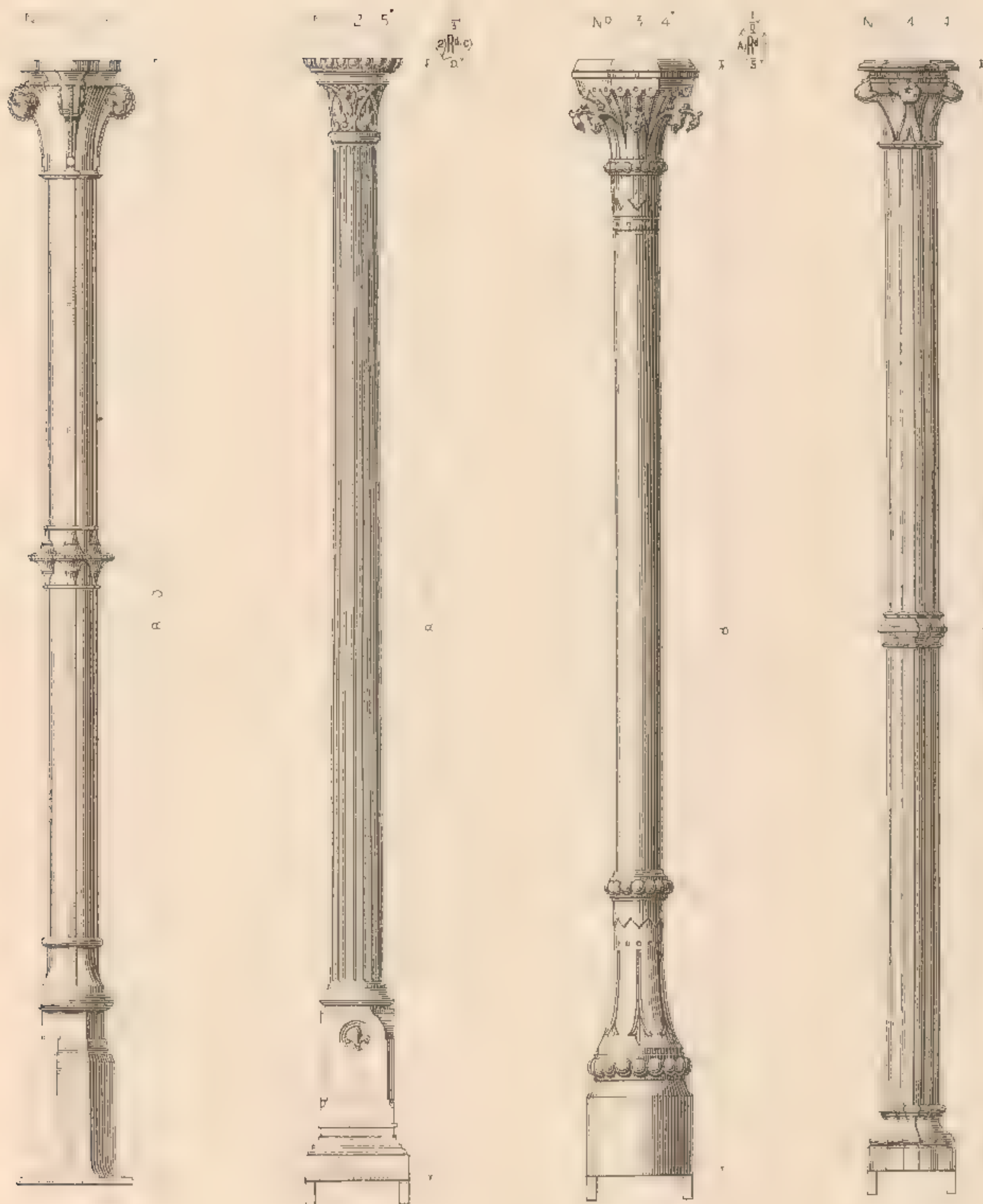


No 10 3" $\frac{1}{8}$ "
R^c
D



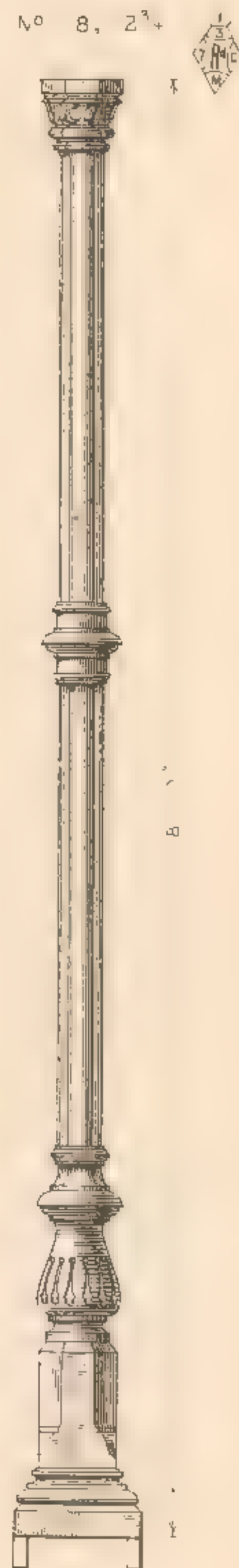
SCALE 1 INCH = 1 FOOT

MACFARLANE'S COLUMNS



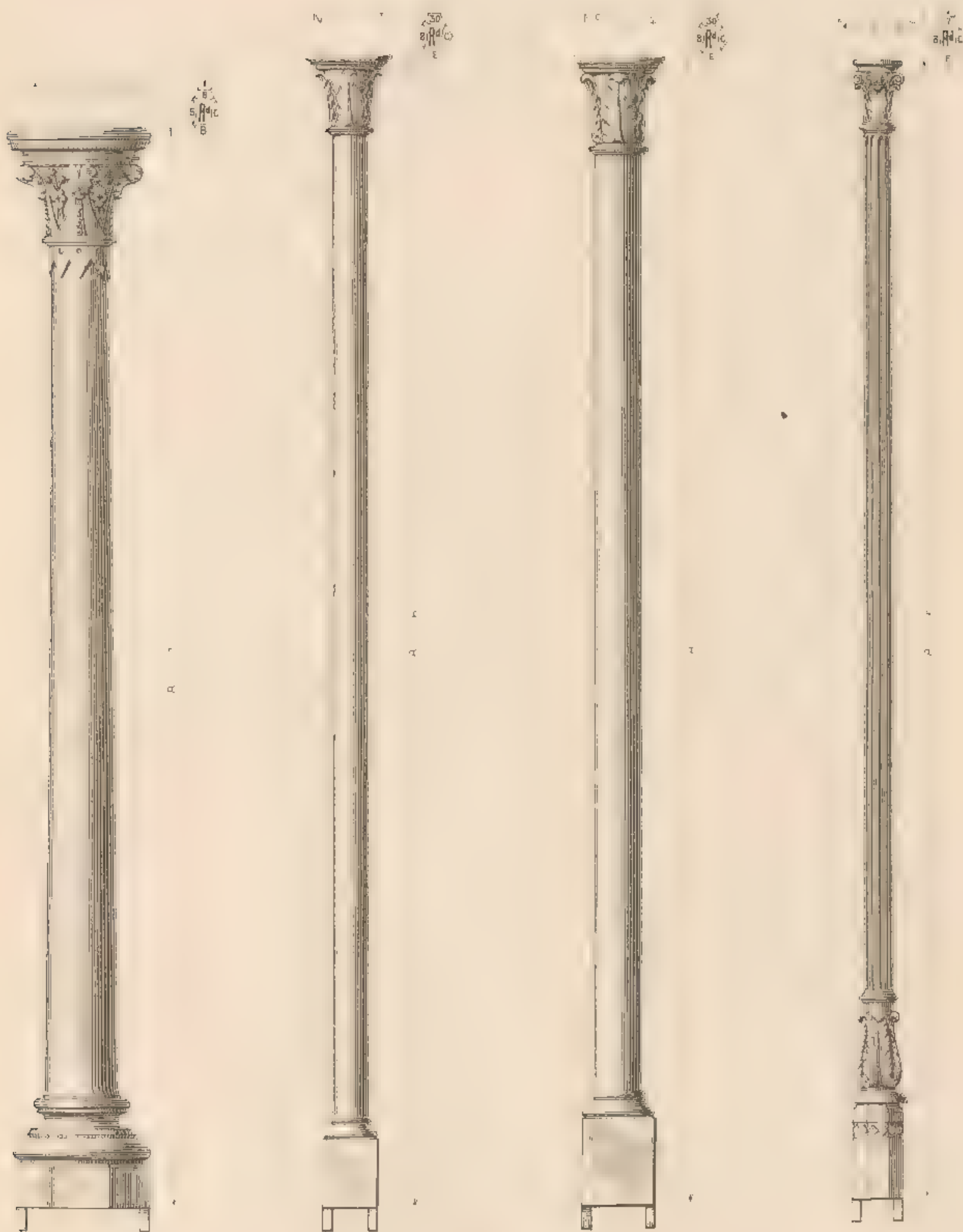
SCALE 1 INCH = FOOT

MACFARLANE'S COLUMNS



SCALE 1 INCH = FOOT

MACFARLANE'S COLUMNS

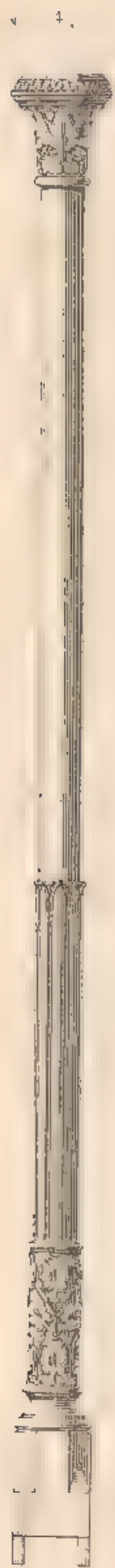


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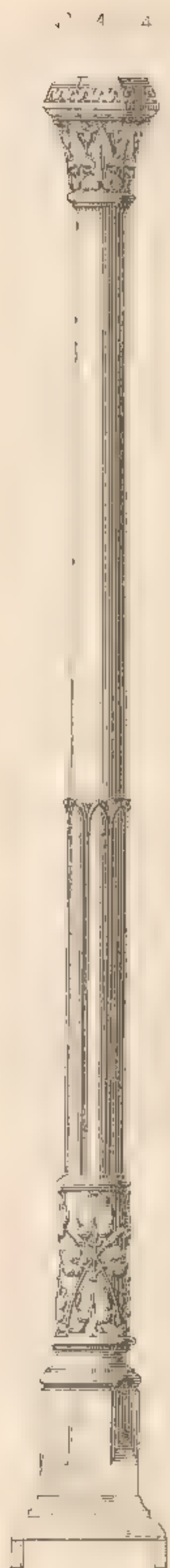


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MACFARLANE'S COLUMNS



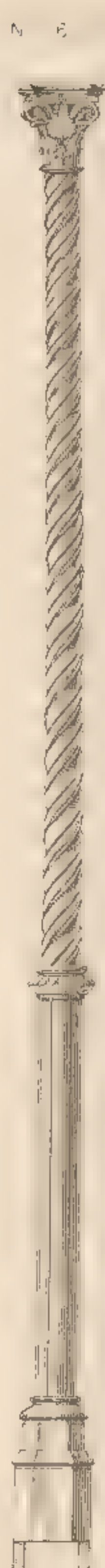
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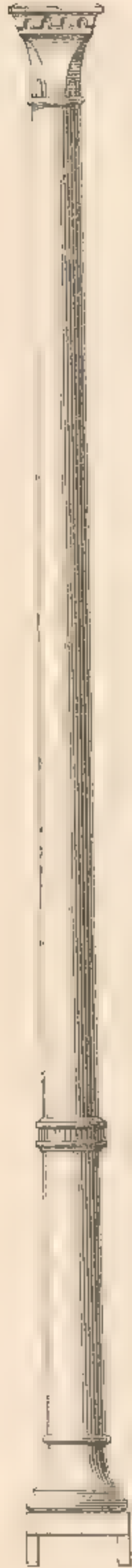
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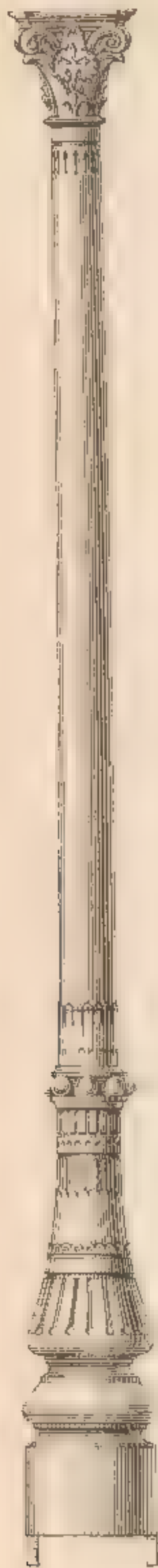
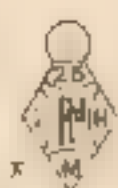
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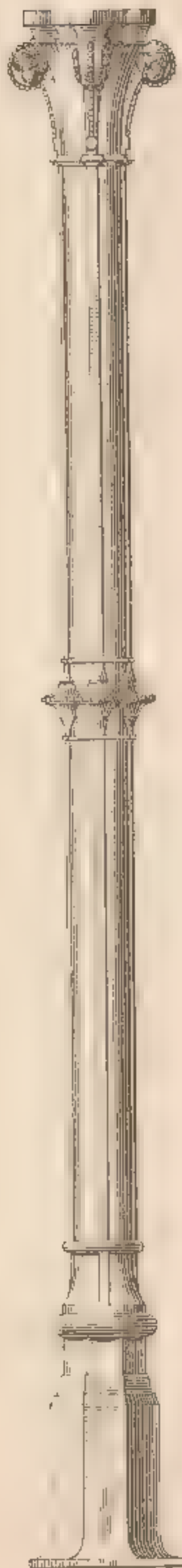
MACFARLANE'S COLUMNS

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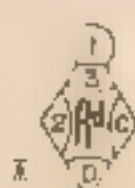
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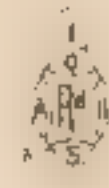
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No. 12, 5



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No. 3, 4



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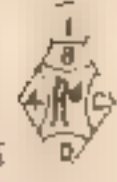
SCALE 1 INCH. = 1 FOOT

MACFARLANE'S COLUMNS

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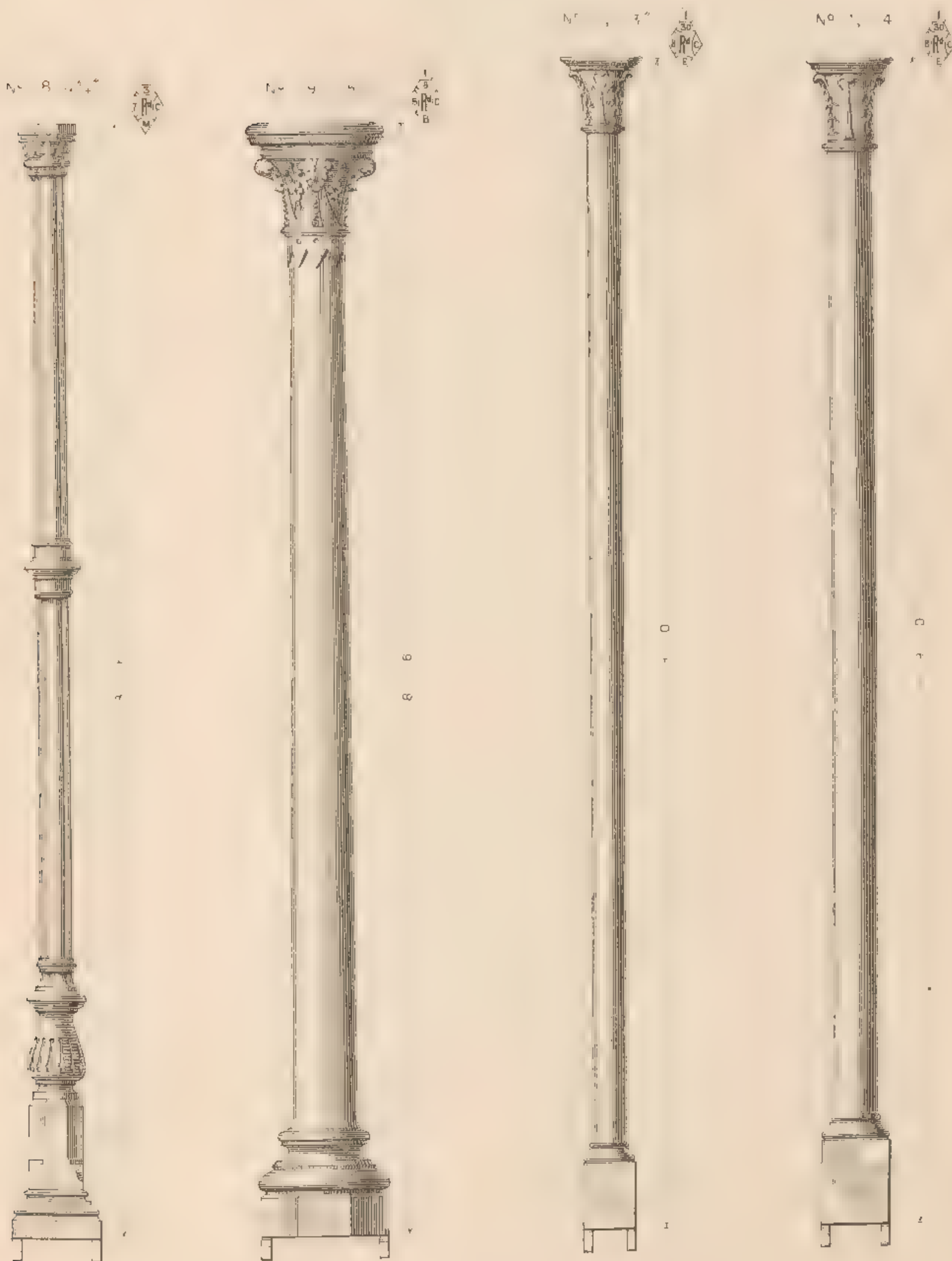


N^o 17, 4 1/2



SCALE 1 INCH = 1 FOOT

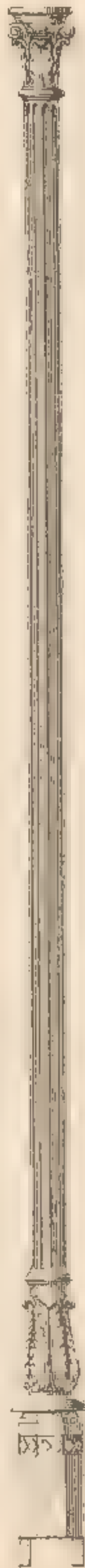
MACFARLANE'S COLUMNS



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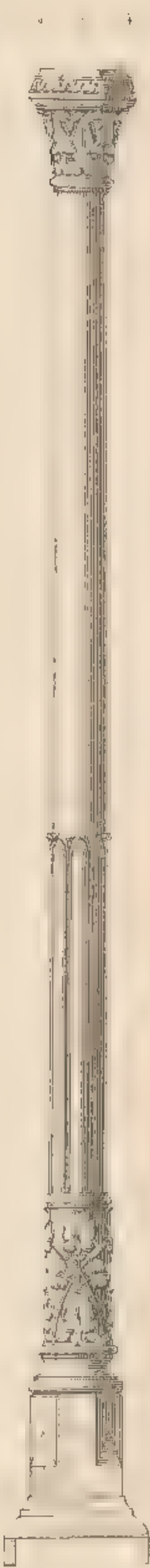
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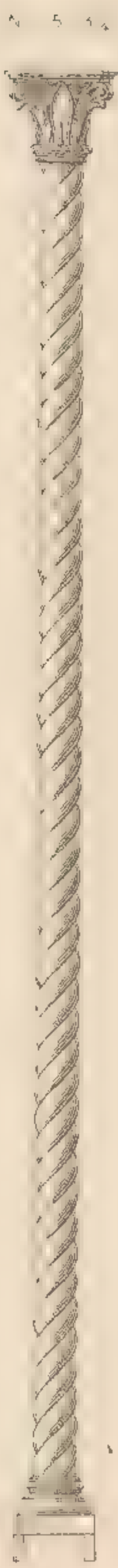
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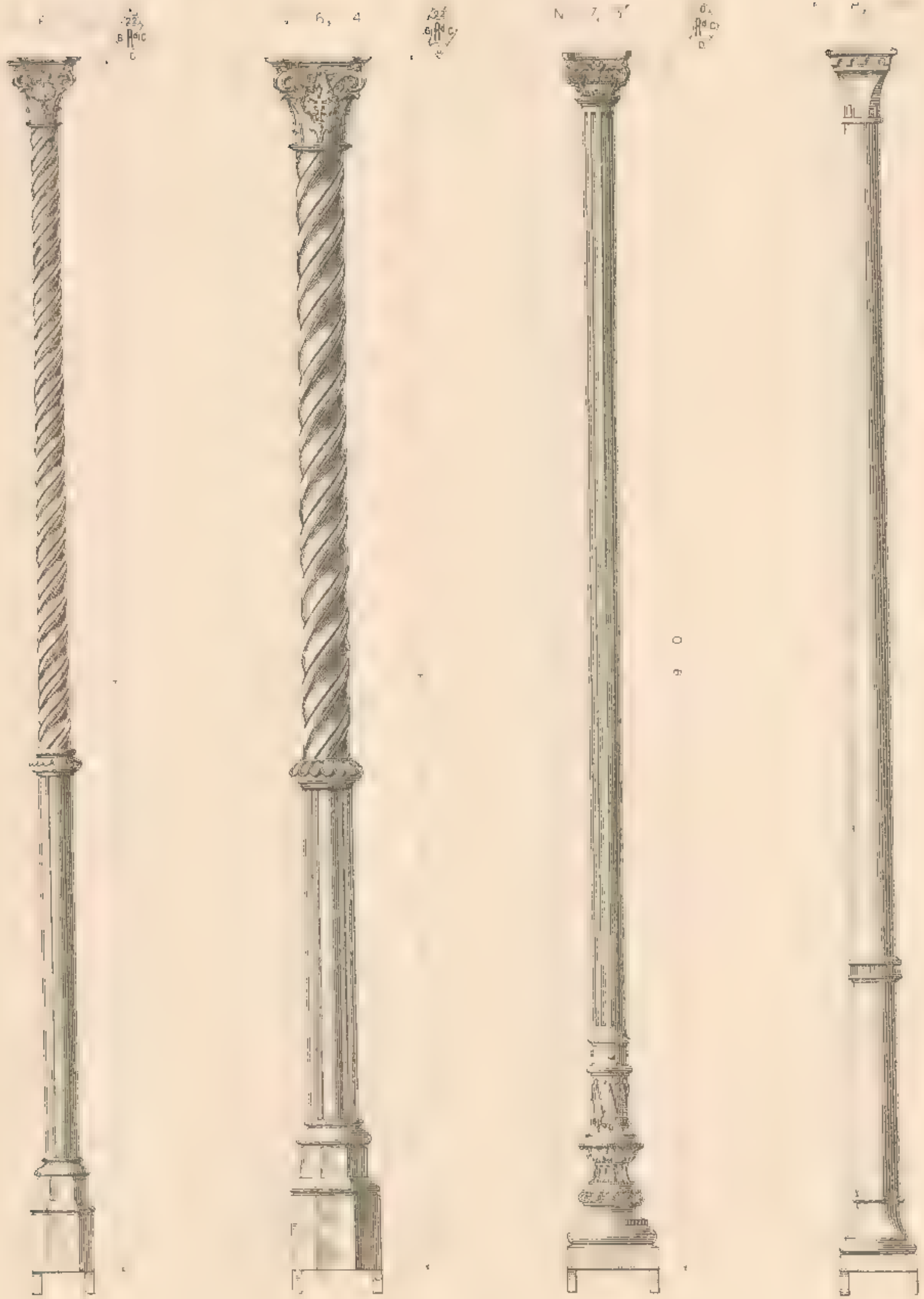
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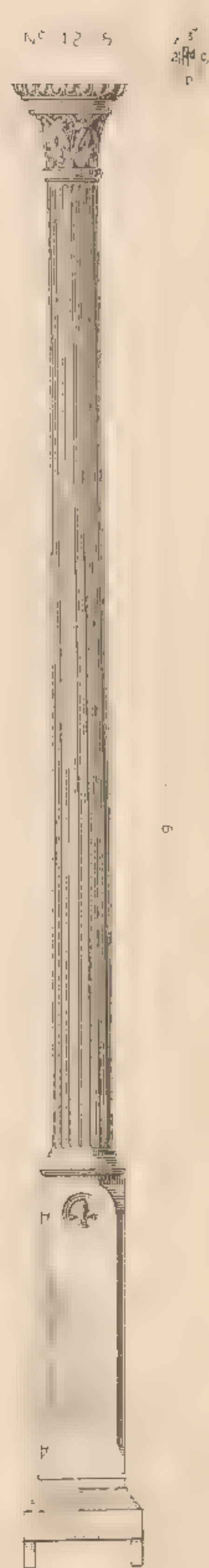
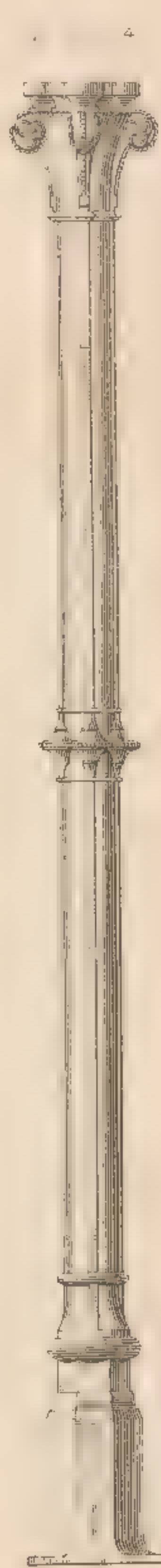
SCALE 1/2 INCH

MACFARLANE'S COLUMNS

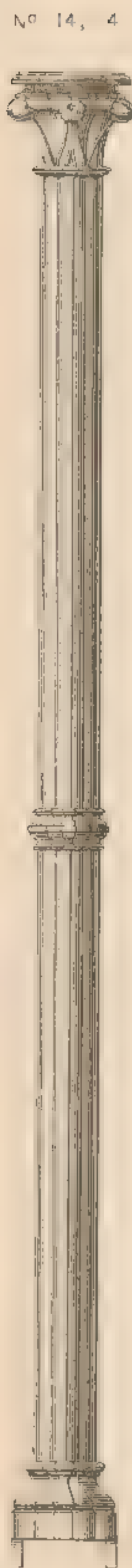
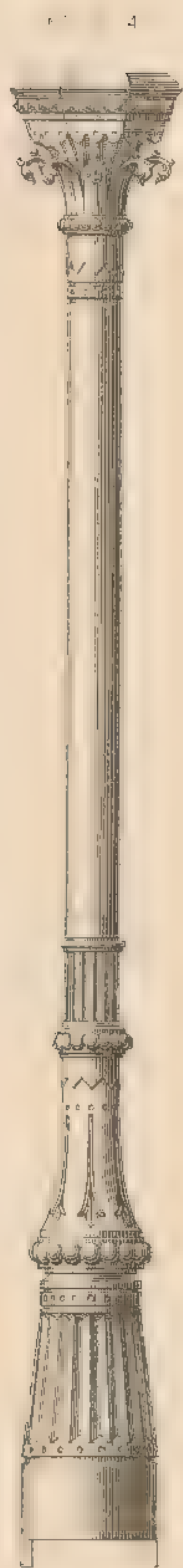


SCALE IN FEET

MACFARLANE'S COLUMNS

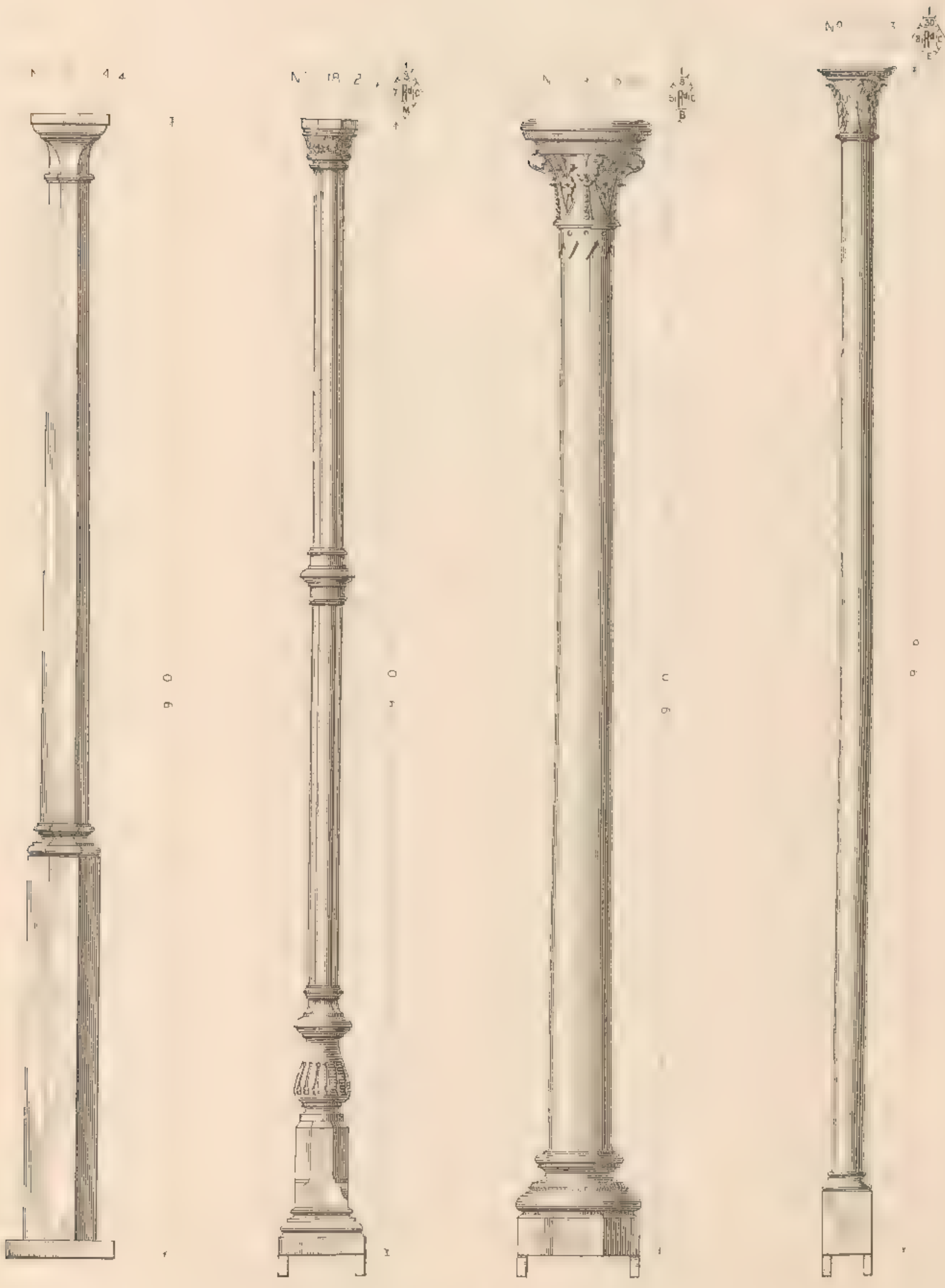


MACFARLANE'S COLUMNS



SCALE INCH — FOOT

MACFARLANE'S COLUMNS



SCALE 1 INCH FOOT

MACFARLANE'S COLUMNS



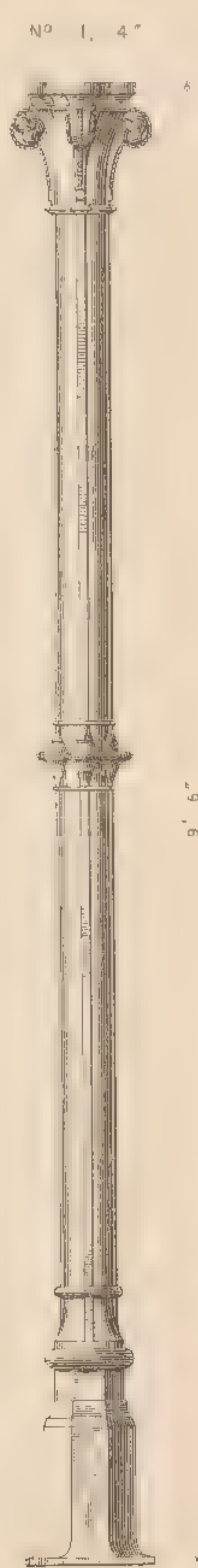
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PLATE C COLUMNS

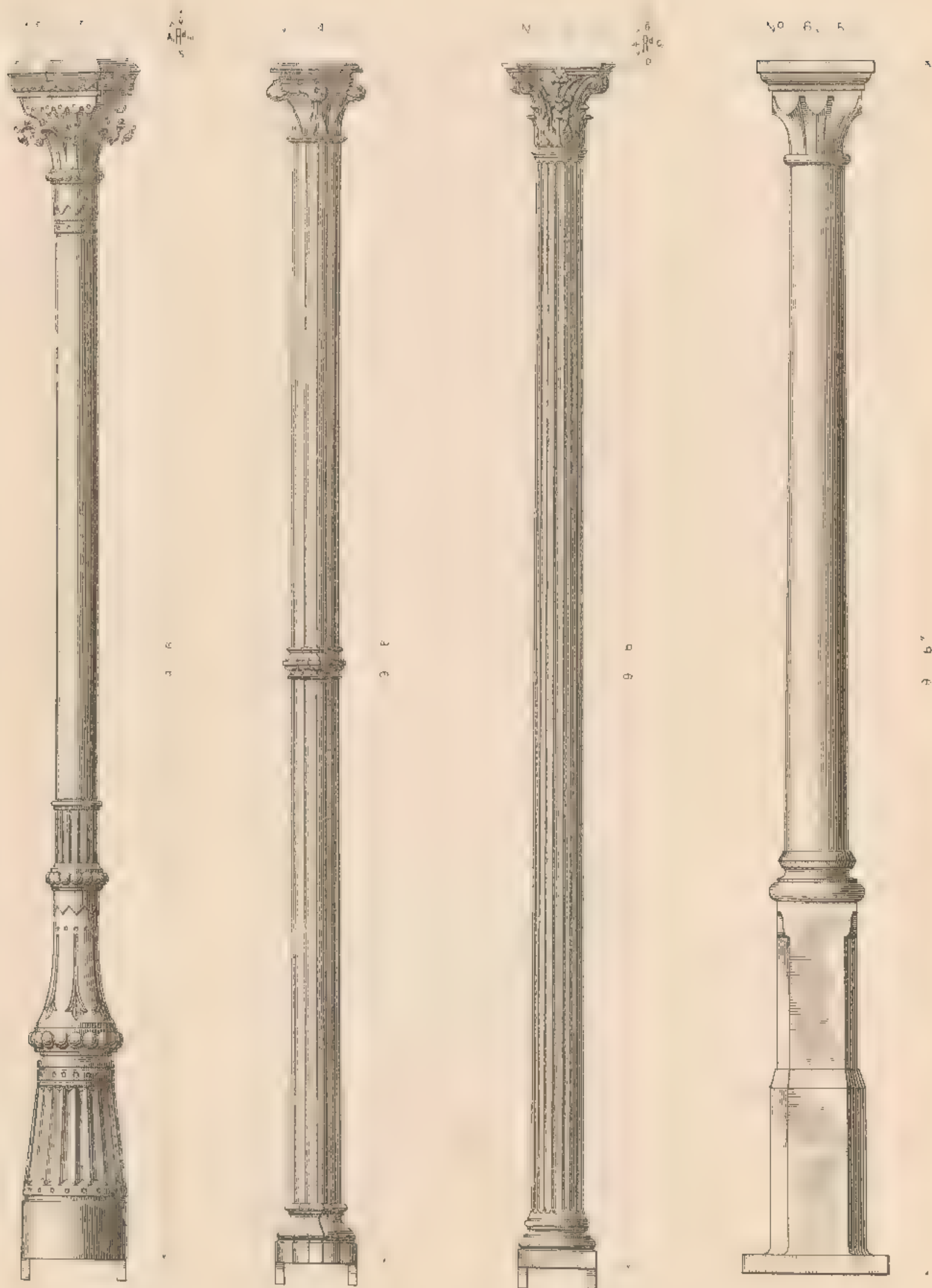


MACFARLANE'S COLUMNS



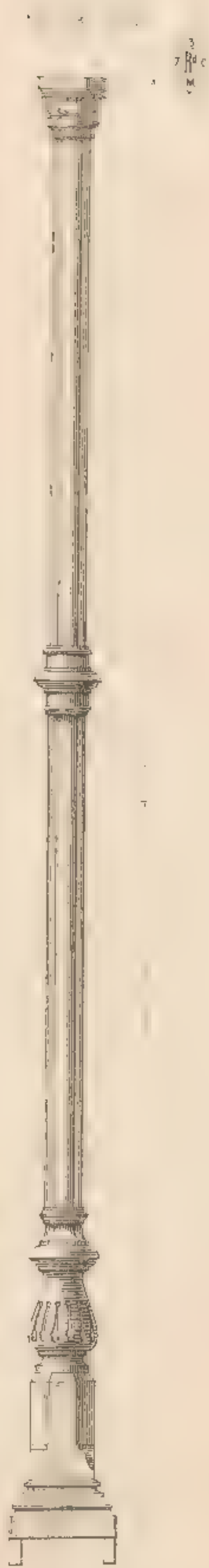
SCALE 1 INCH = FOOT

MACFARLANE'S COLUMNS



SCALE 1 INCH = 1 FOOT

MACFARLANE COLUMNS



MACFARLANE'S COLUMNS



ALL DIMENSIONS IN FEET

MANIFACTURES

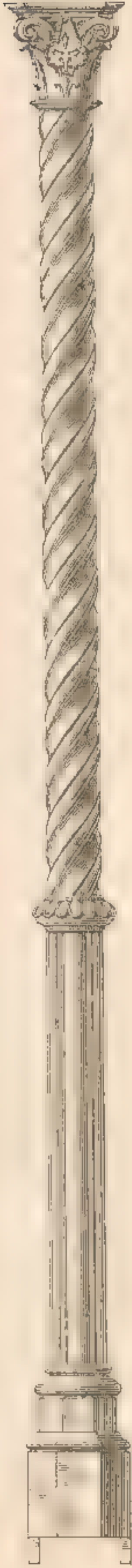
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No 6 4

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C
M

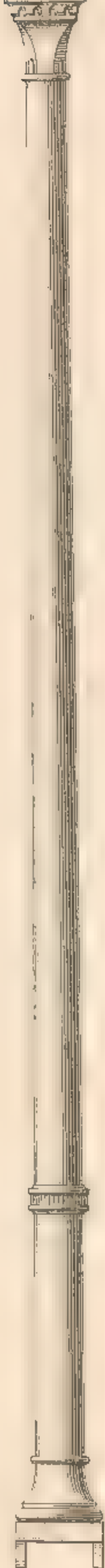


No 7 2

T
P
C
M

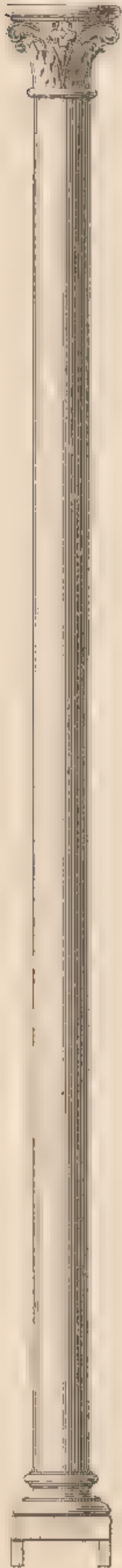


No 8 1



MA FARLANES COL MRS

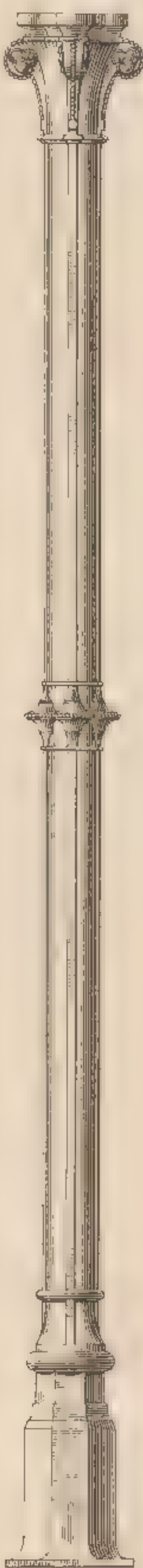
Nº 3 4" $\frac{1}{8}$
6 1/2
D



Nº 10, 3" $\frac{1}{8}$
25
1/4
D



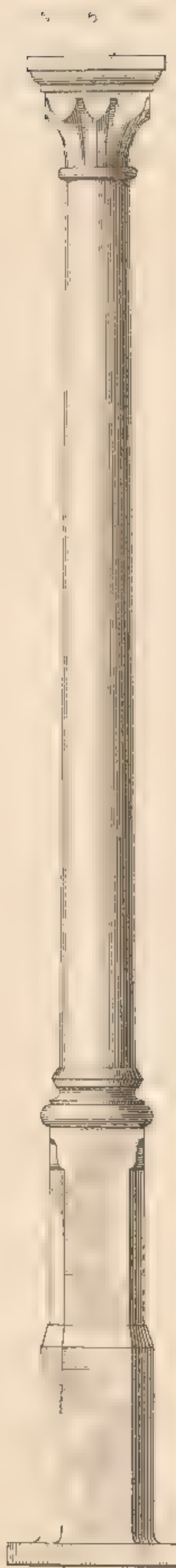
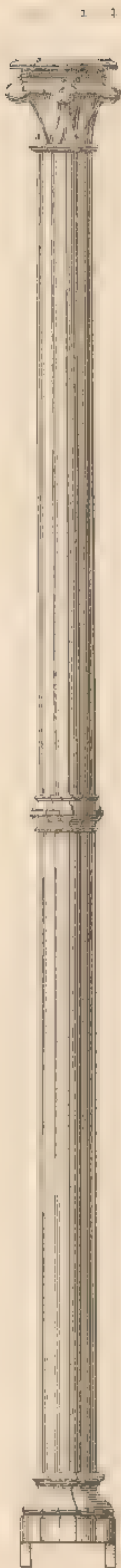
Nº 1 4



Nº 2, 5" $\frac{3}{4}$
1/2
D



MACFARLANE'S COLUMNS



SCALE 1 INCH = 1 FOOT

MACFARLANE'S COLUMNS

No 7 4 4



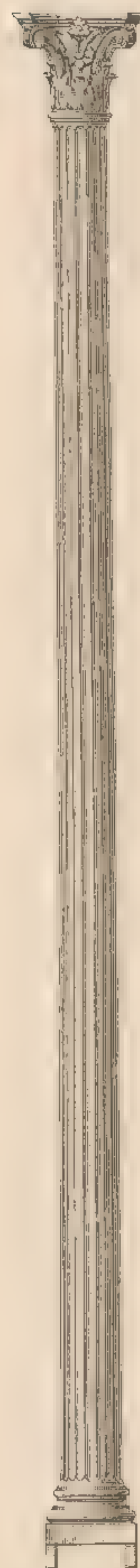
No 8 4 4



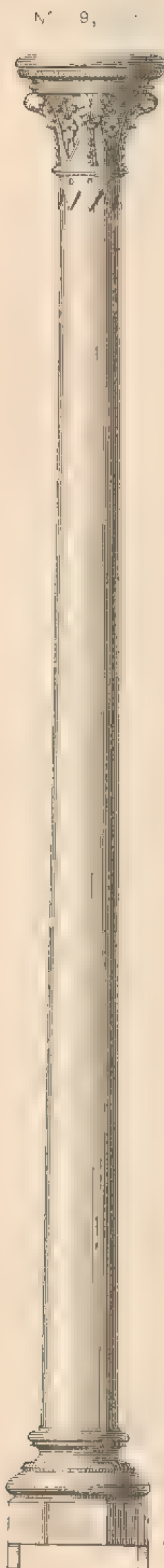
No 9 4 4



No 10 4 4



SCALE INCH



MACFARLANE'S PILASTERS.

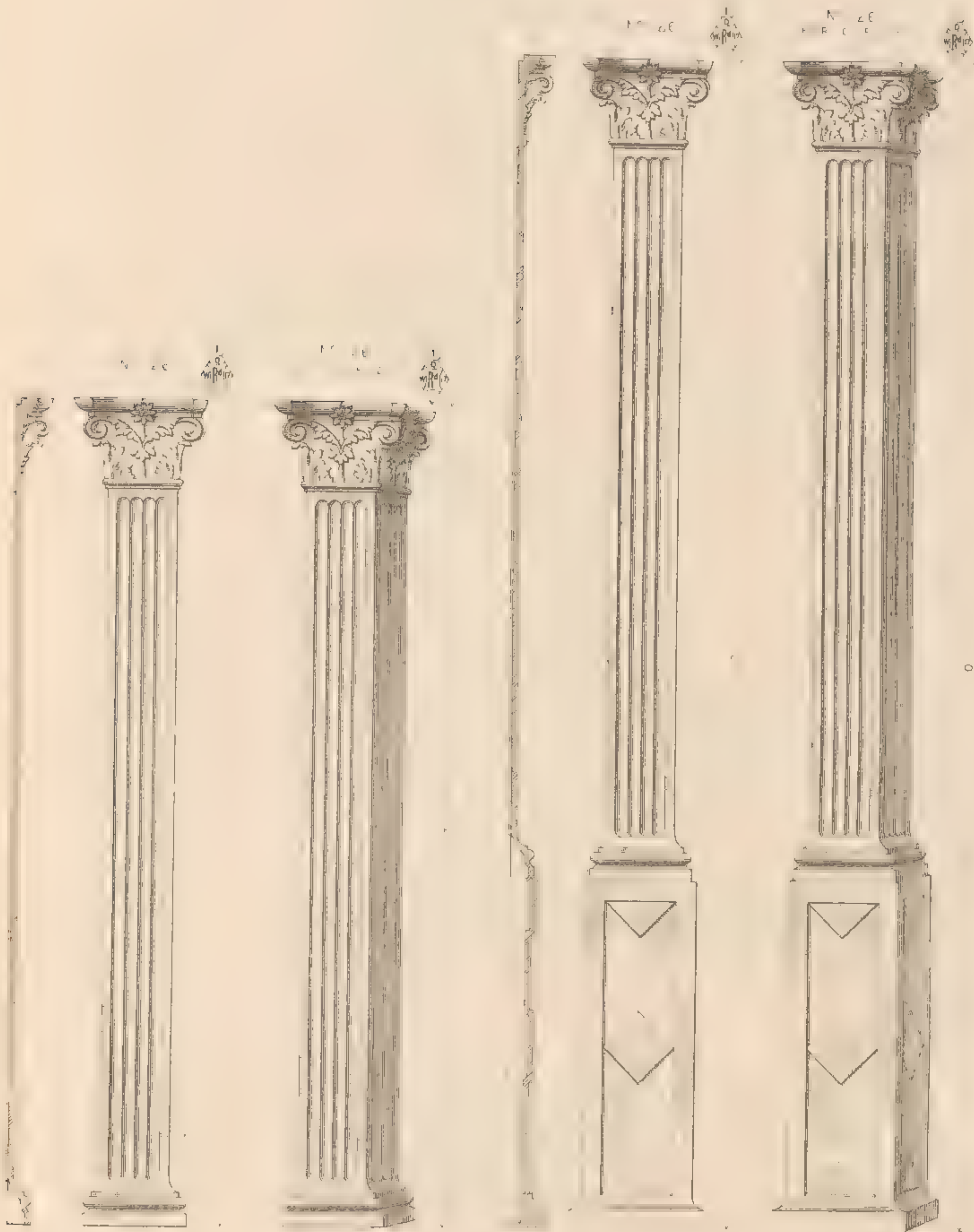


SCALE 1/4" = 1' FOOT

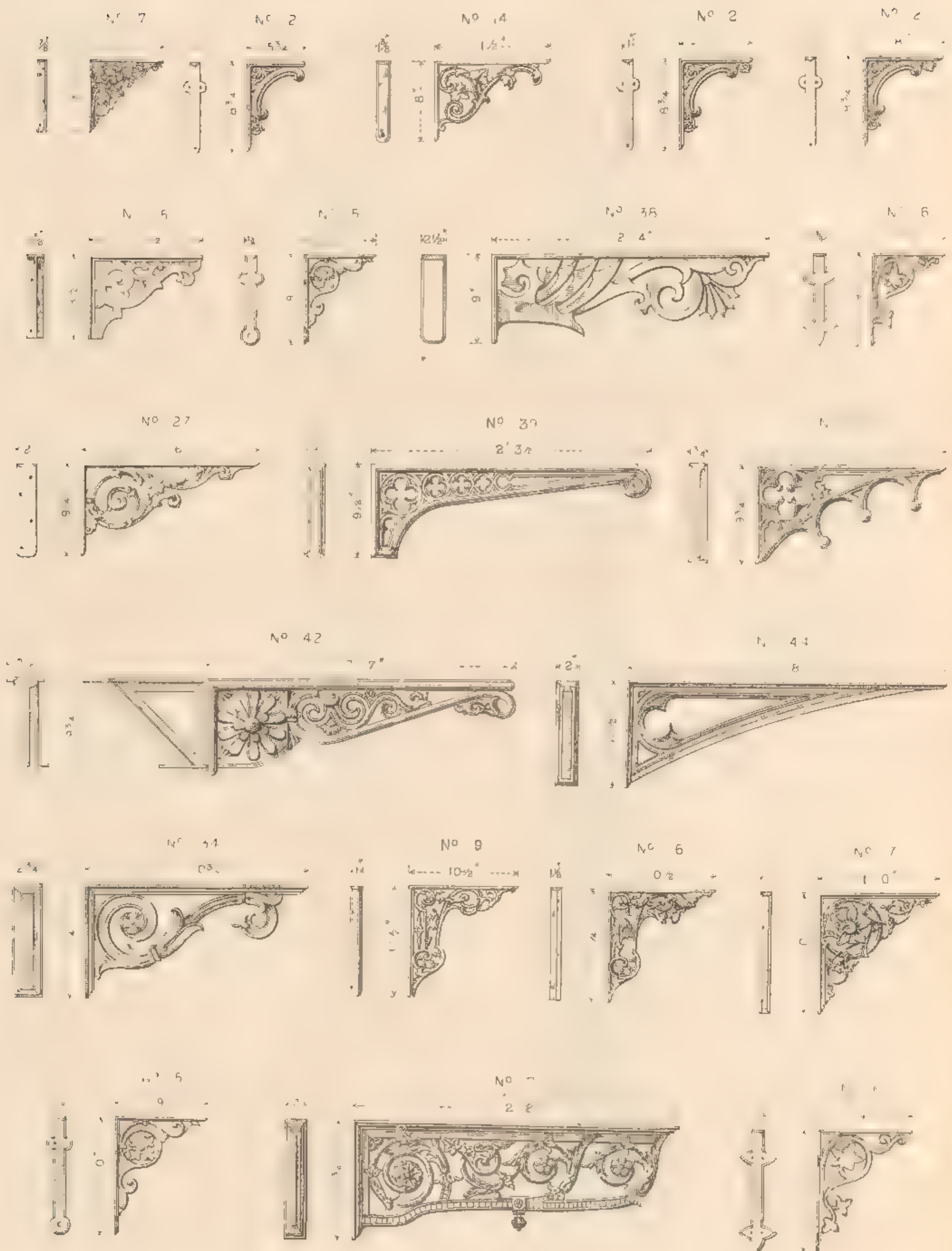
MACFARLANE'S PILASTERS.



MACFARLAN 3 P LATTERS



MACFARLANE'S BRACKETS AND SPANDRILS



SCALE 1 INCH = 1 FOOT

MACFARLANE'S BRACKETS AND SPANDRILS



SCALE : INCH = 1 FOOT

MACFARLANE'S BRACKETS AND SPANDR.LS

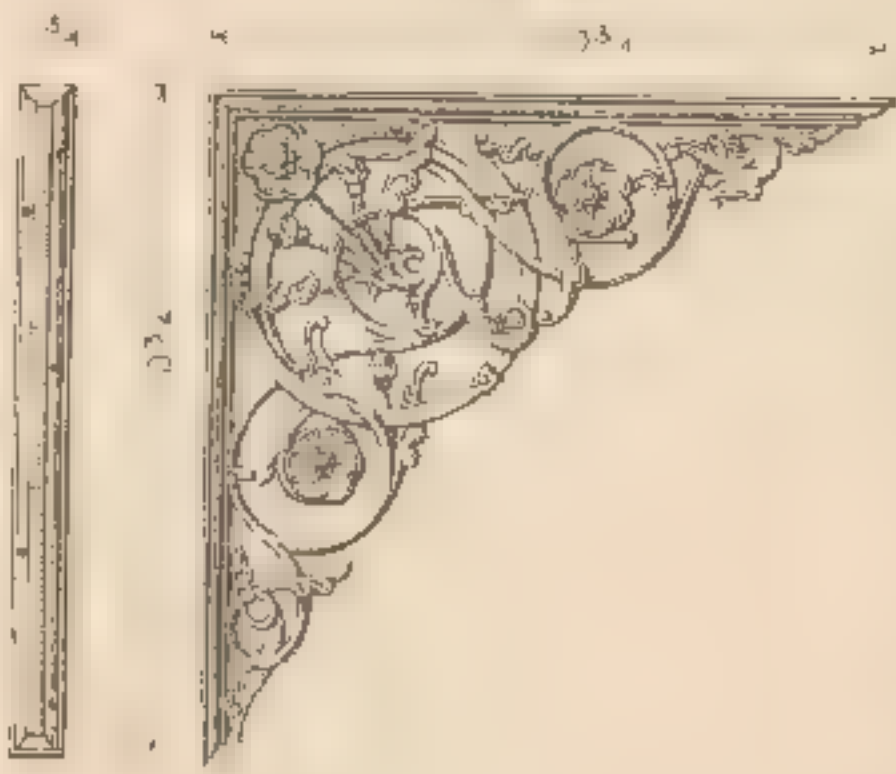
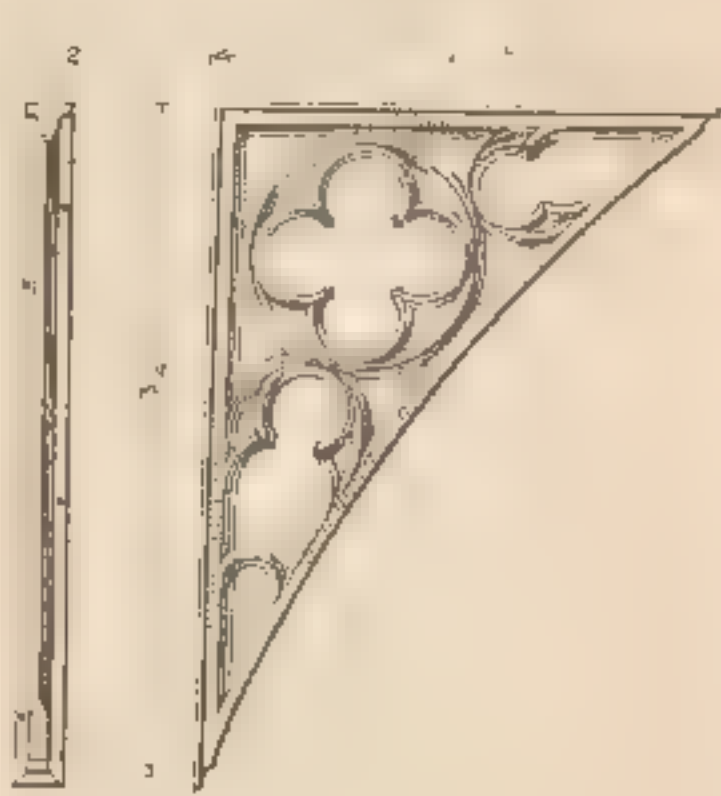
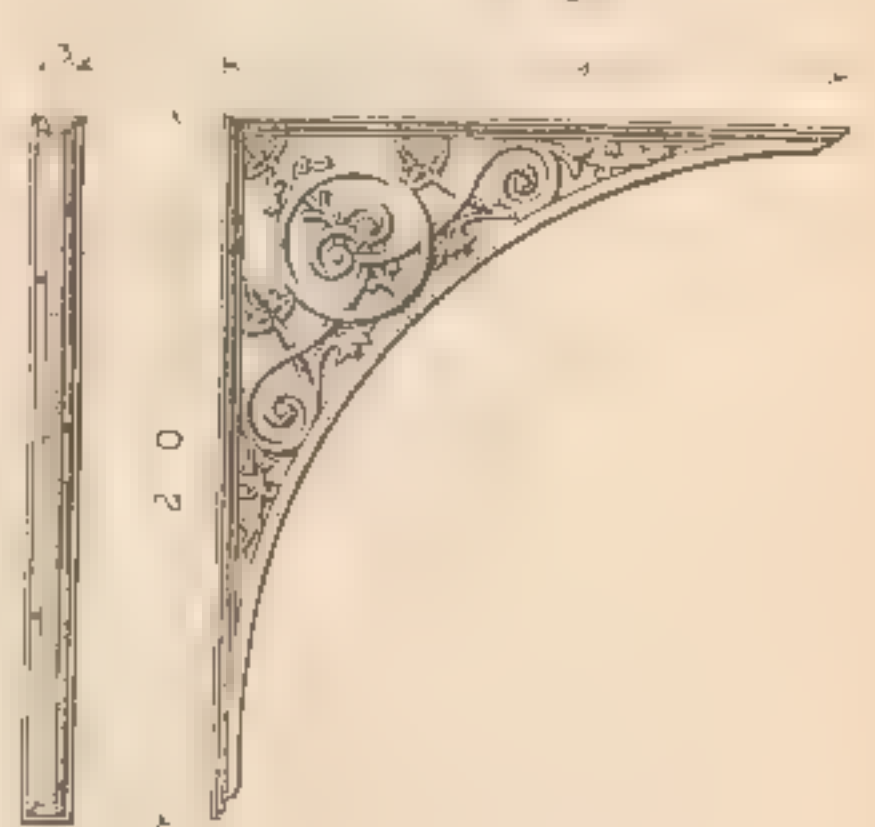
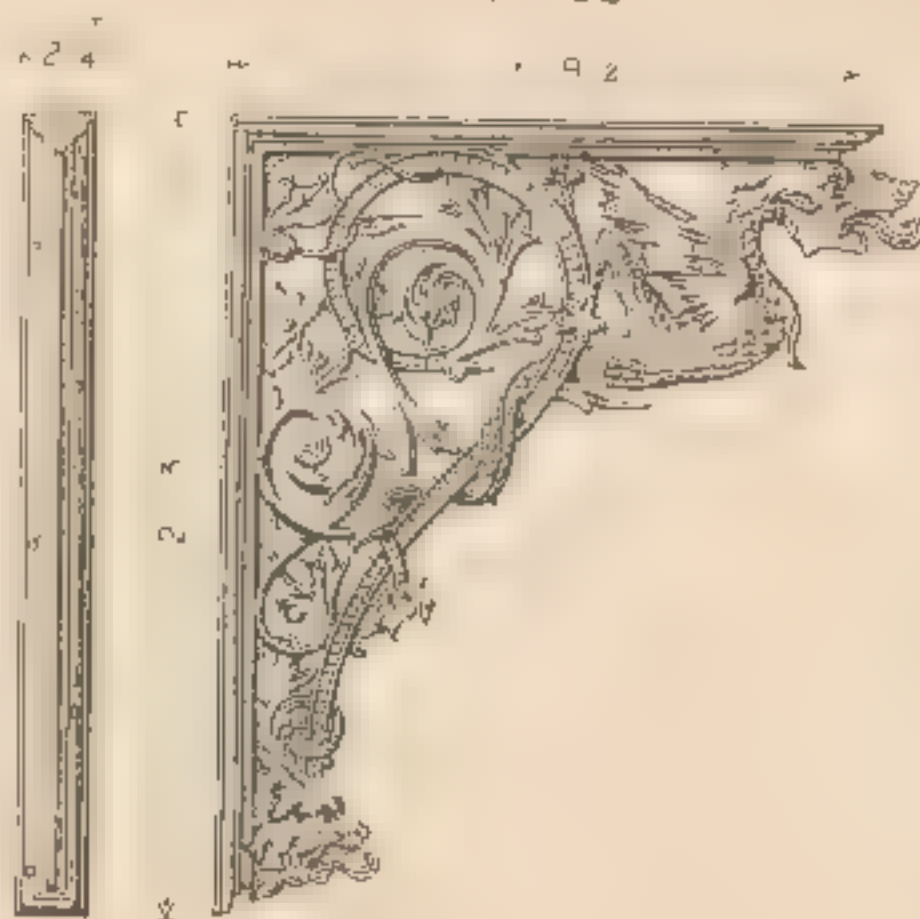
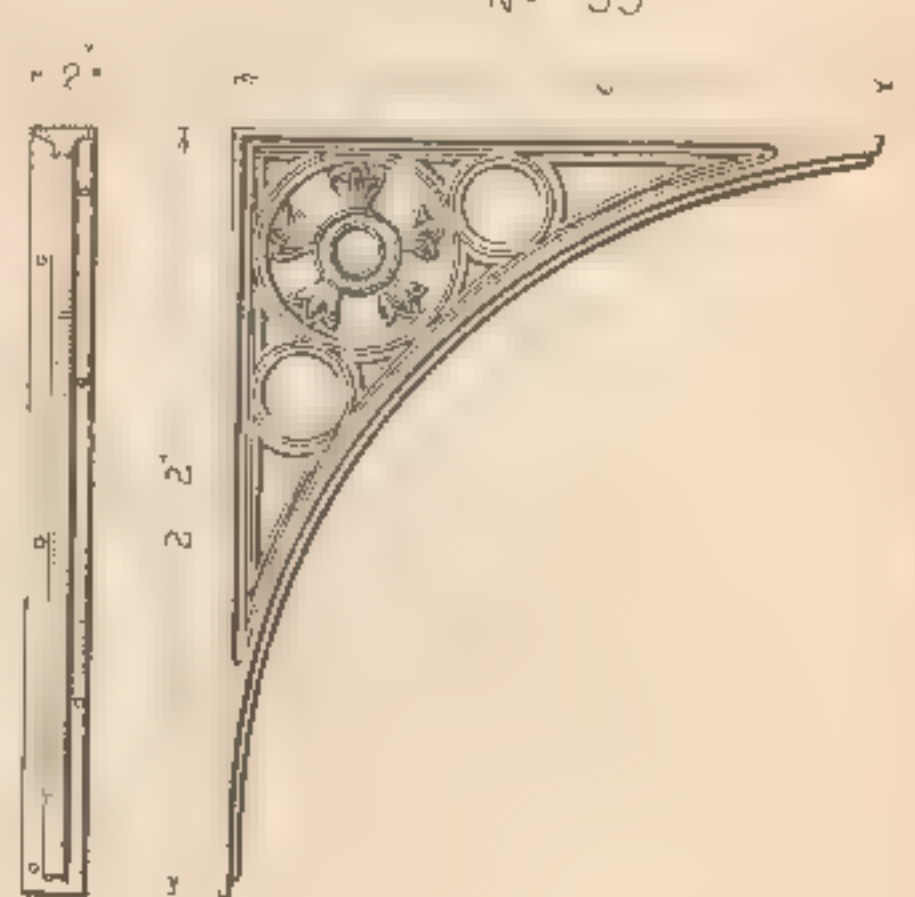
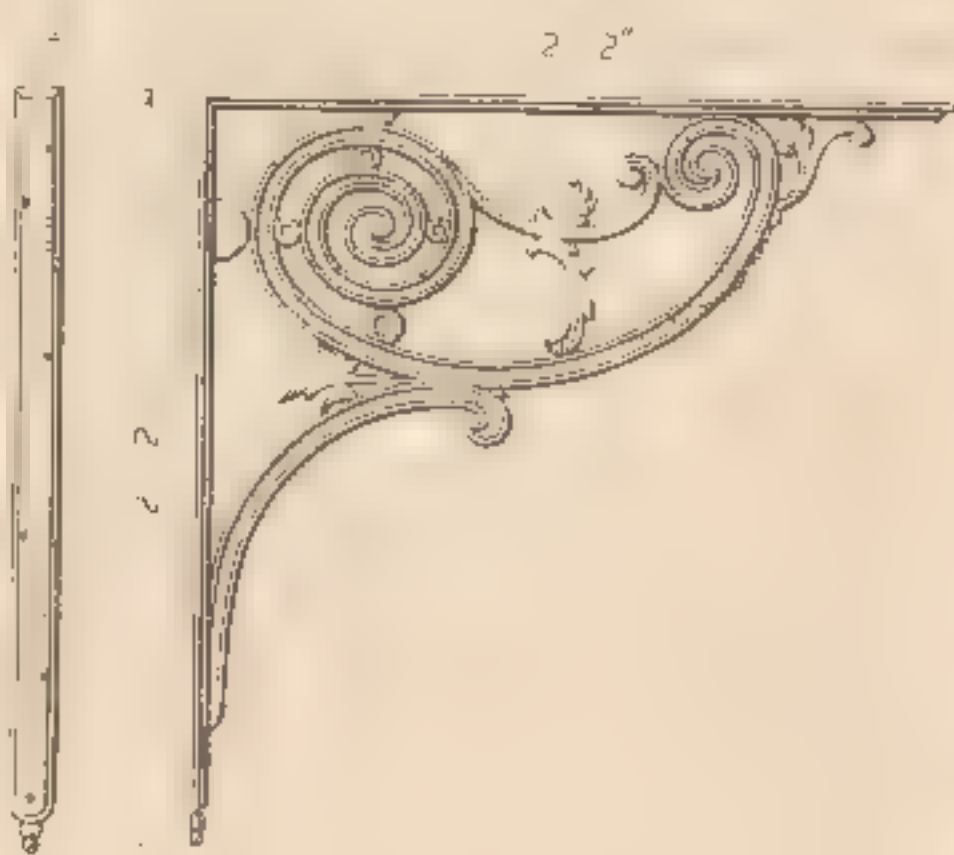
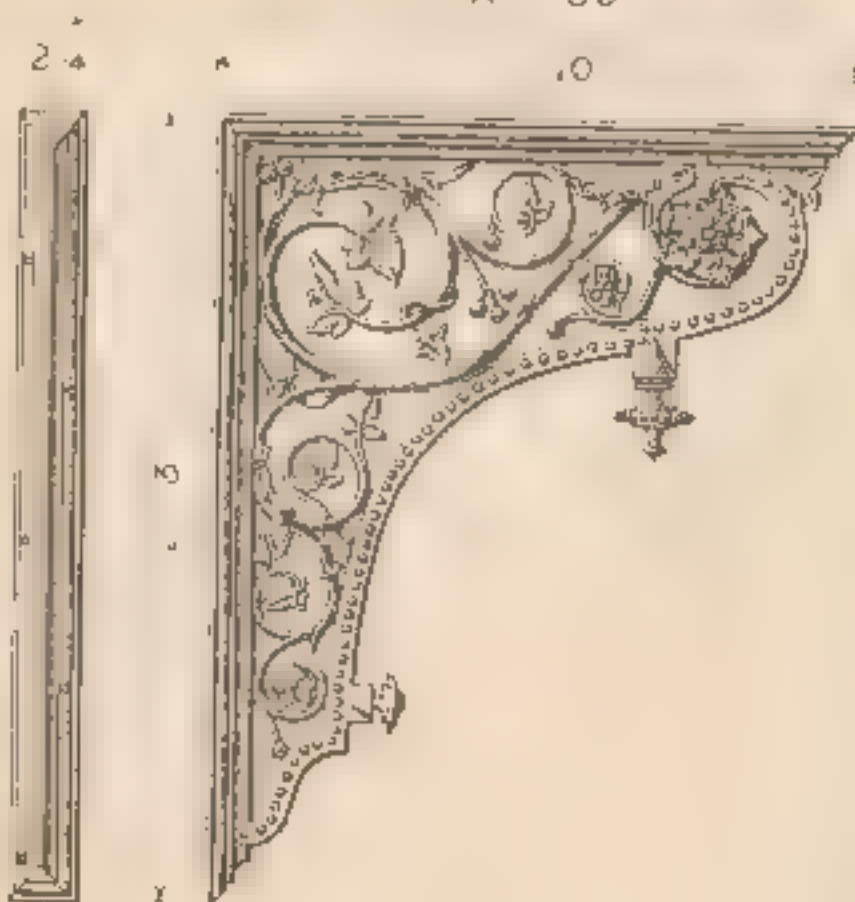
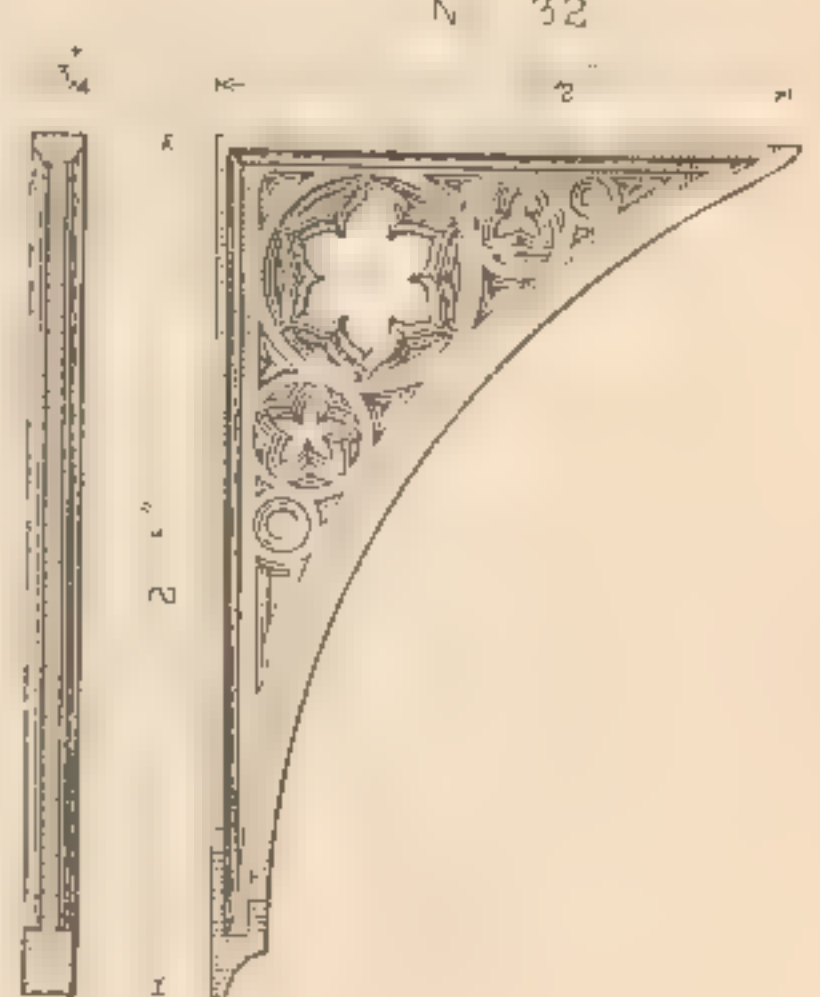


MACFARLANE'S BRACKETS AND SPANDRILS



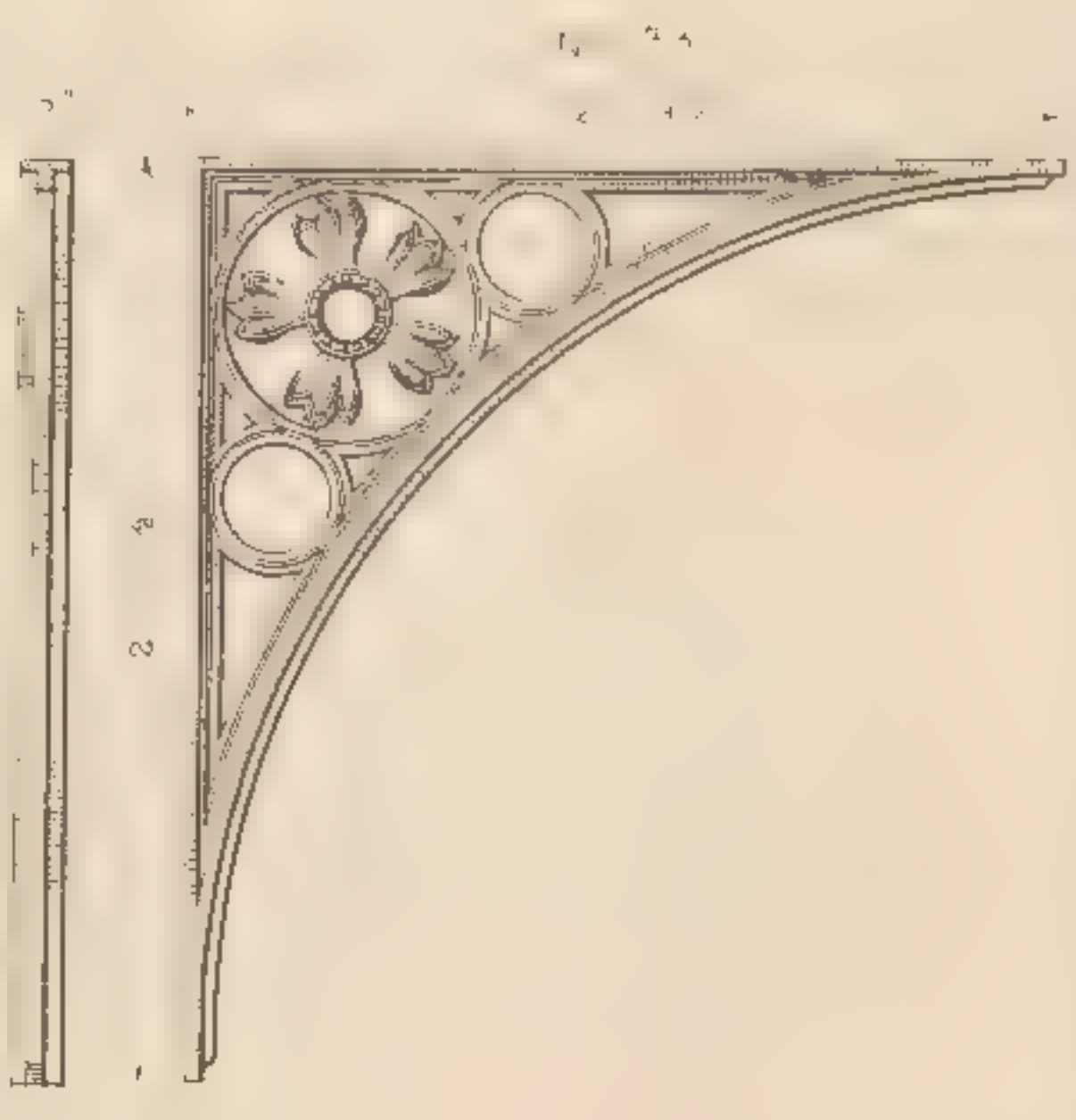
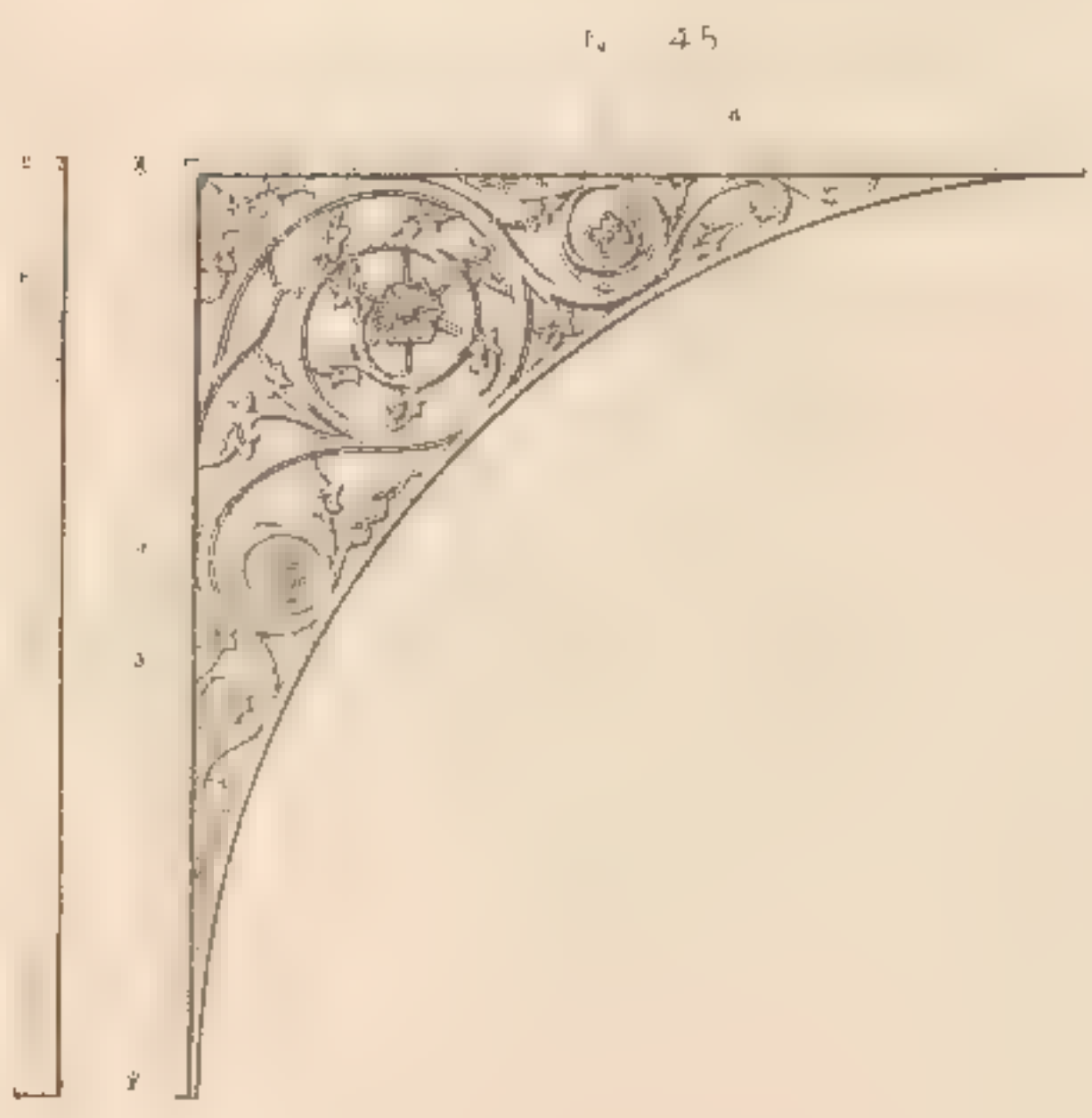
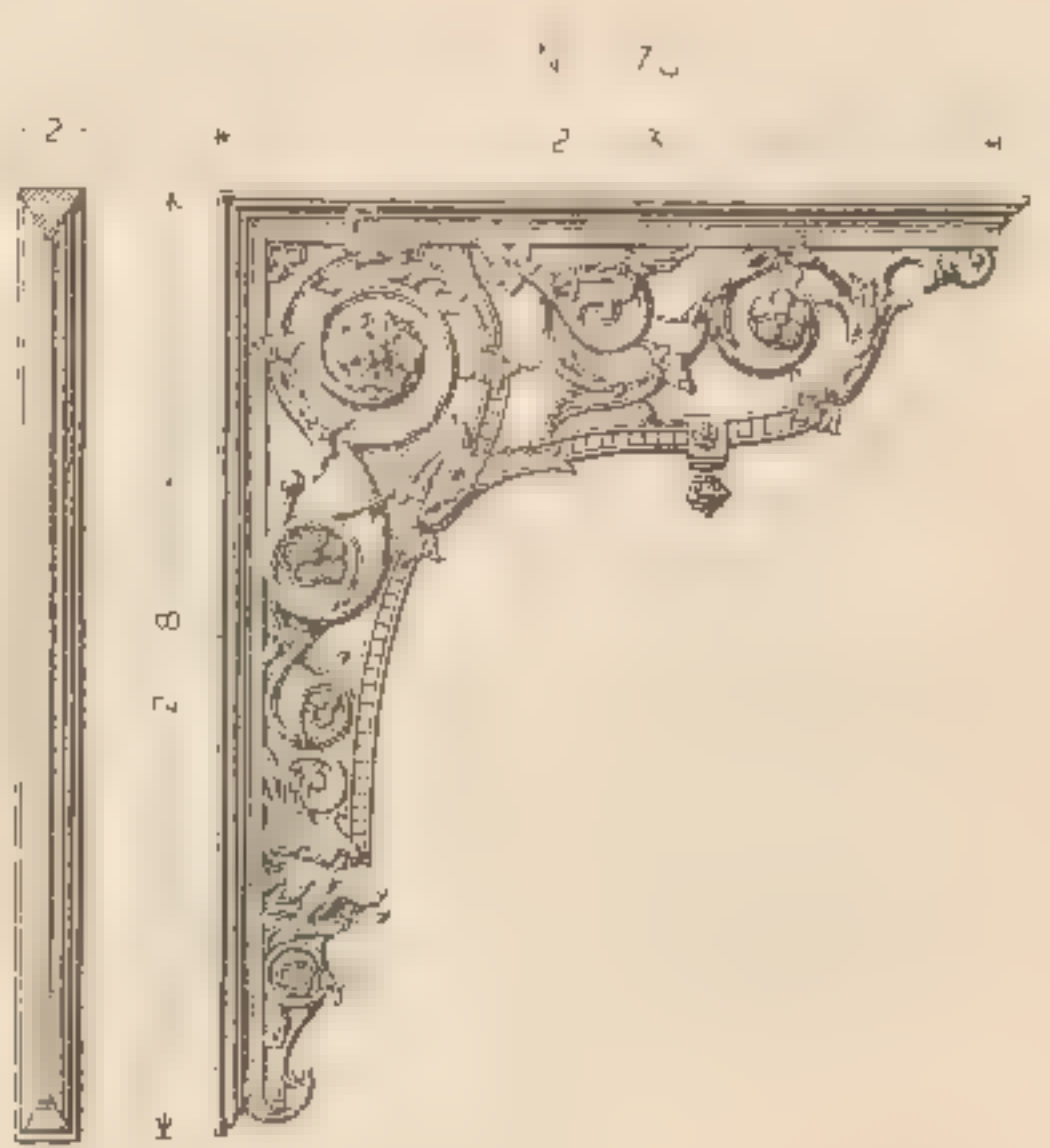
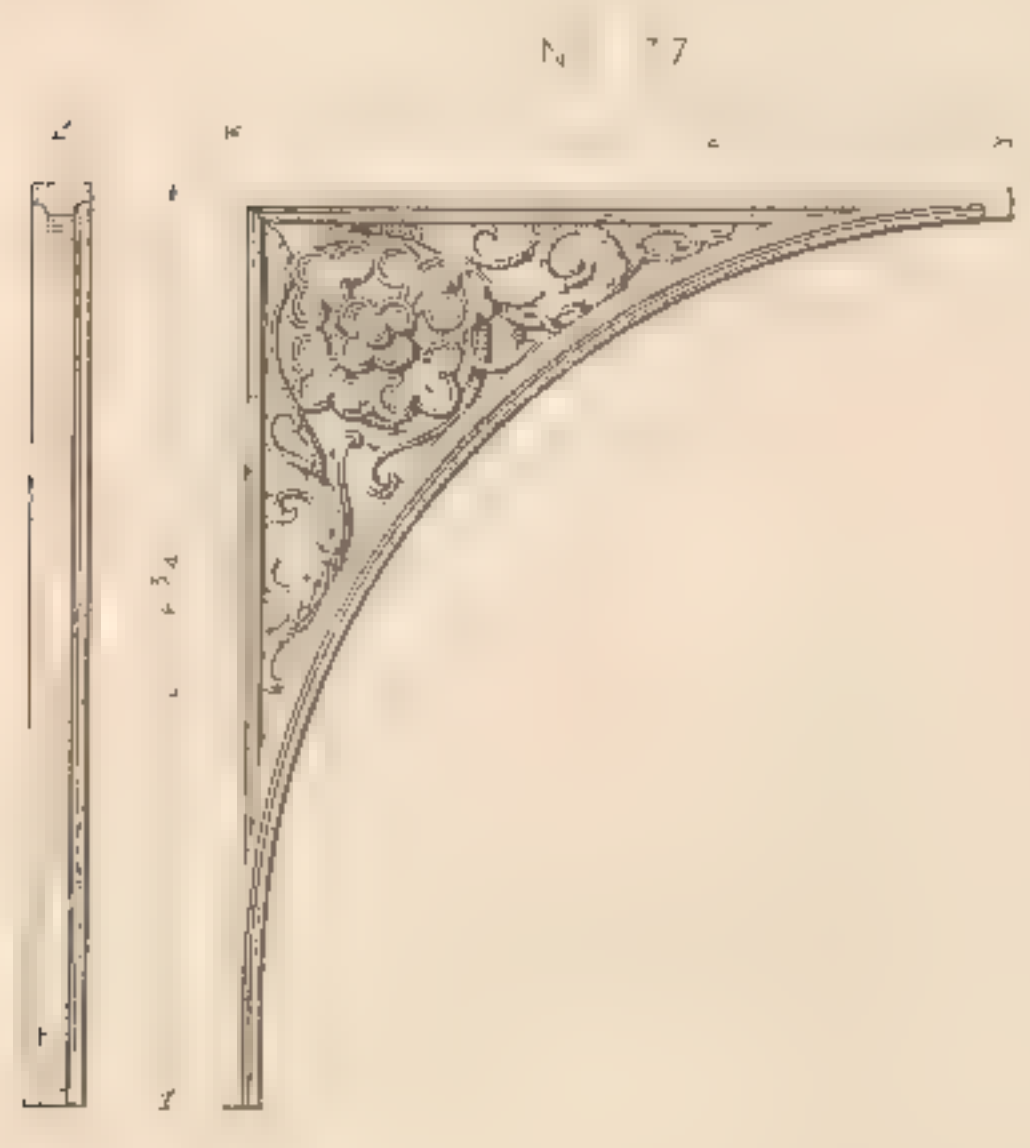
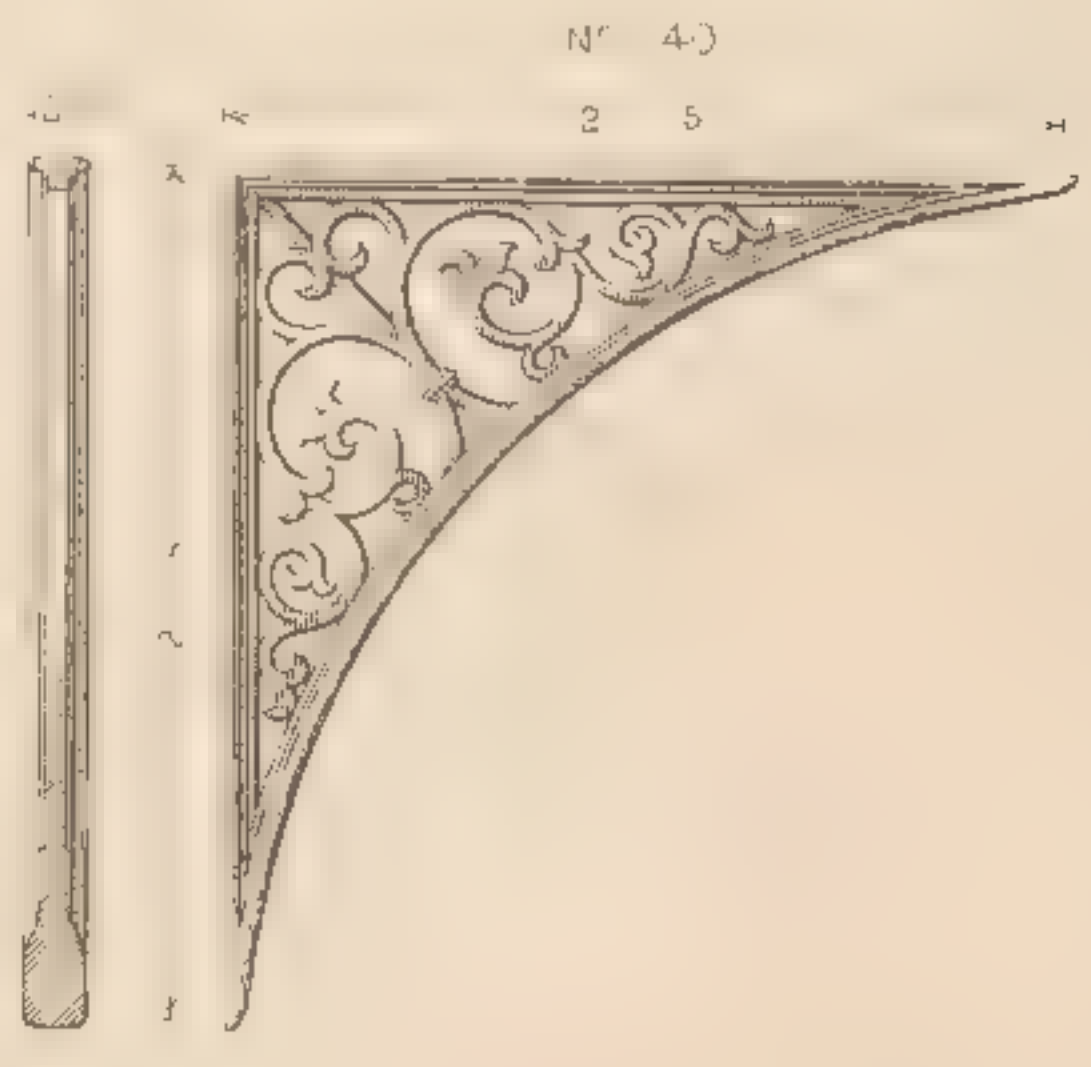
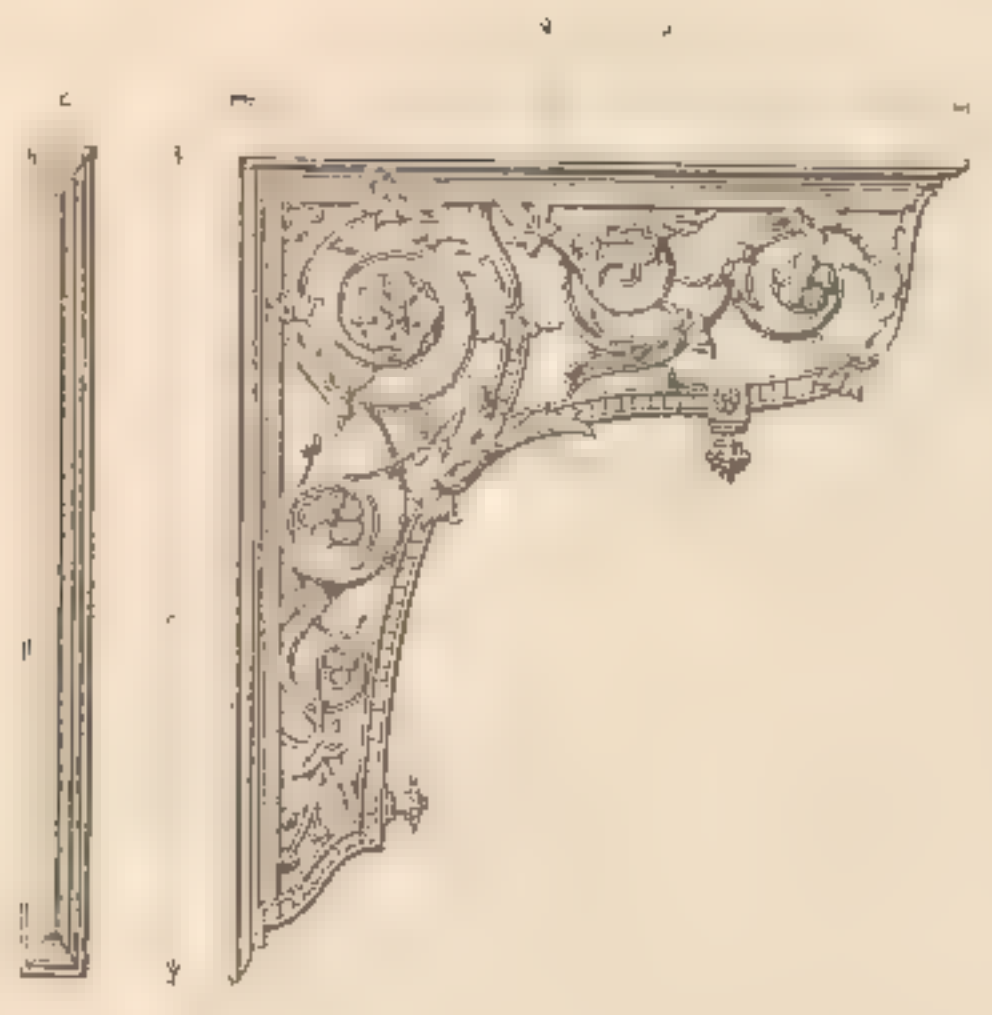
SCALE 1 INCH = 1 FOOT

MACFARLANE'S BRACKETS AND SPANDRILS

N^o 29N^o 26N^o 24N^o 35N^o 68N^o 33N^o 36N^o 69N^o 32

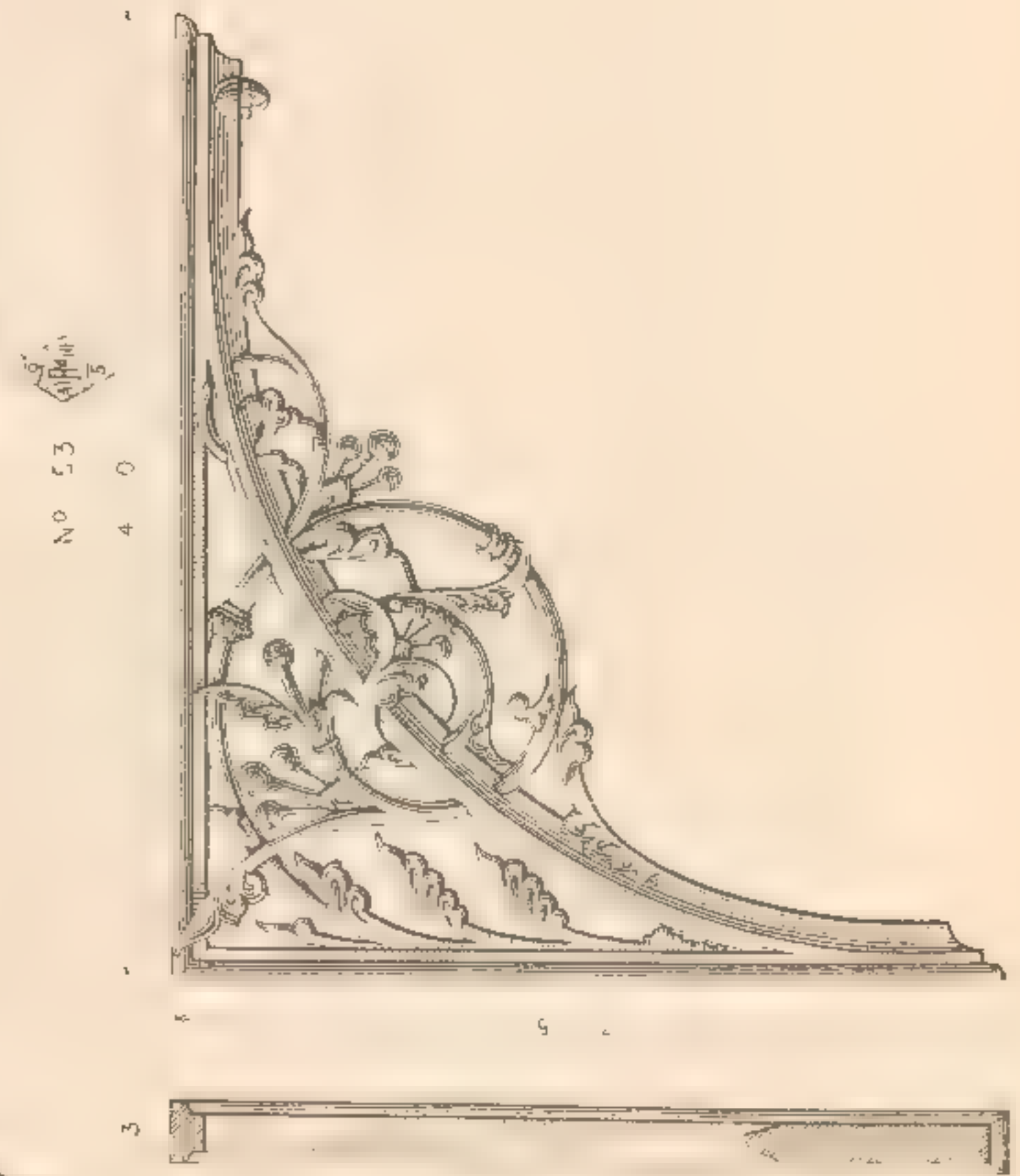
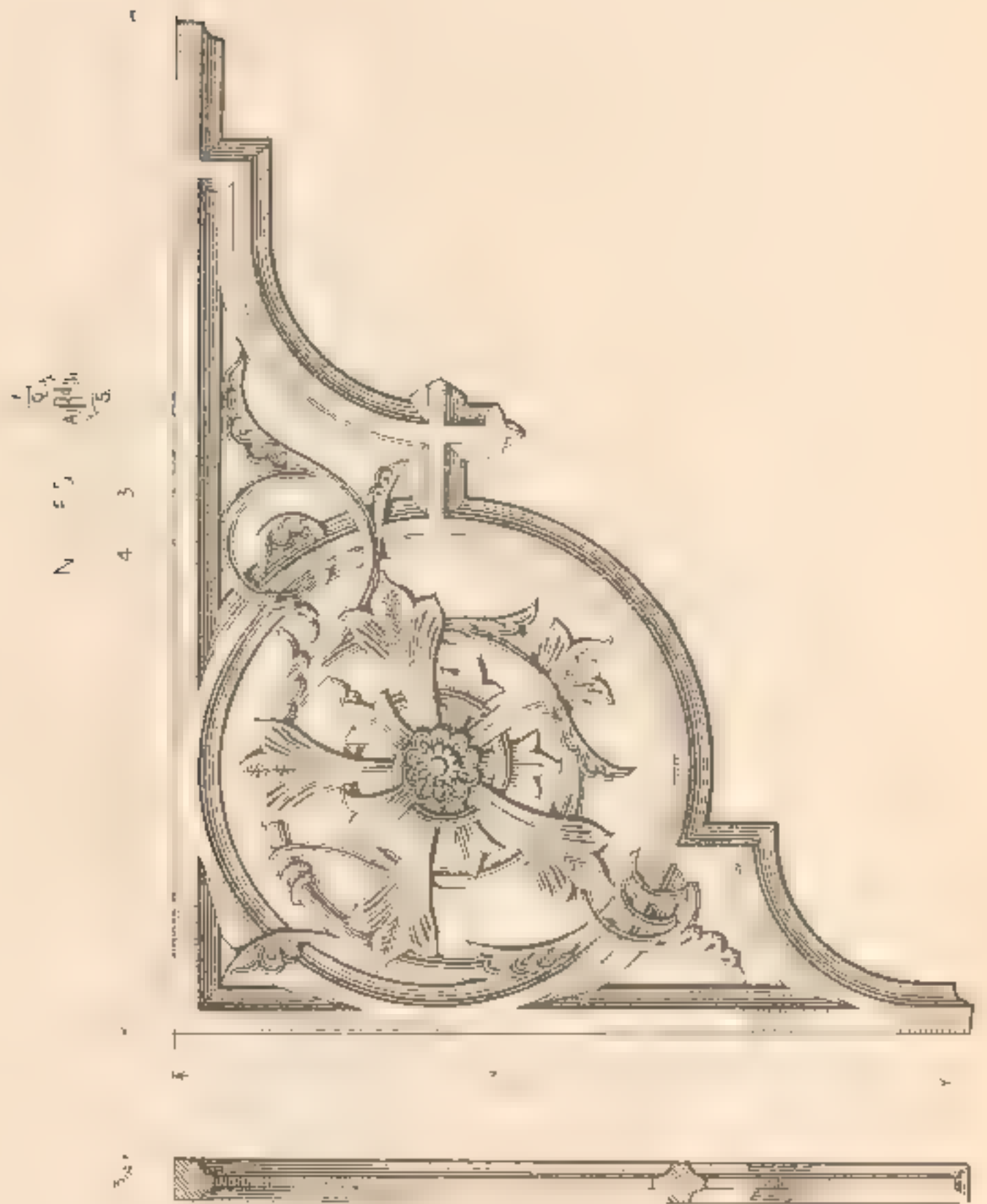
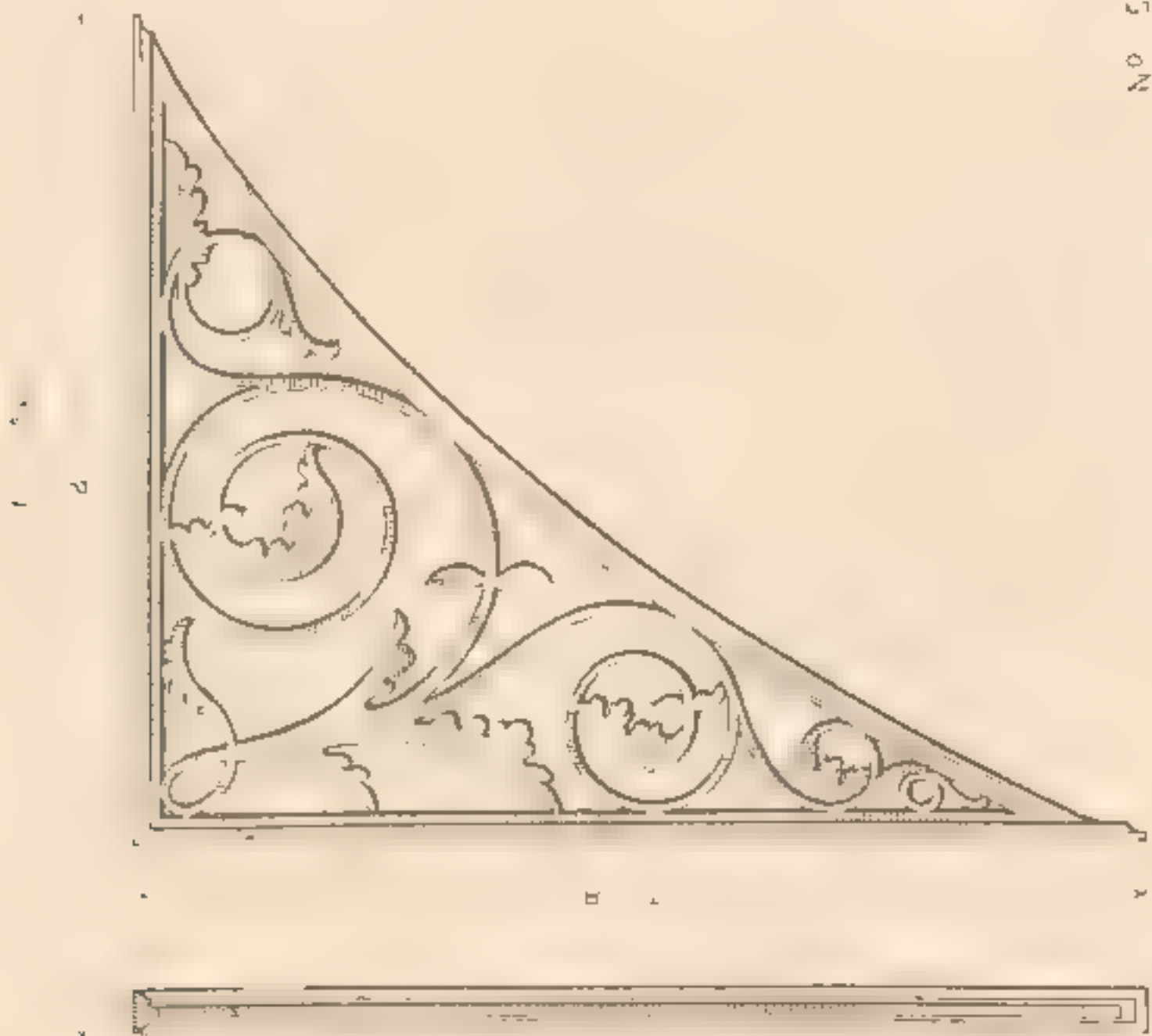
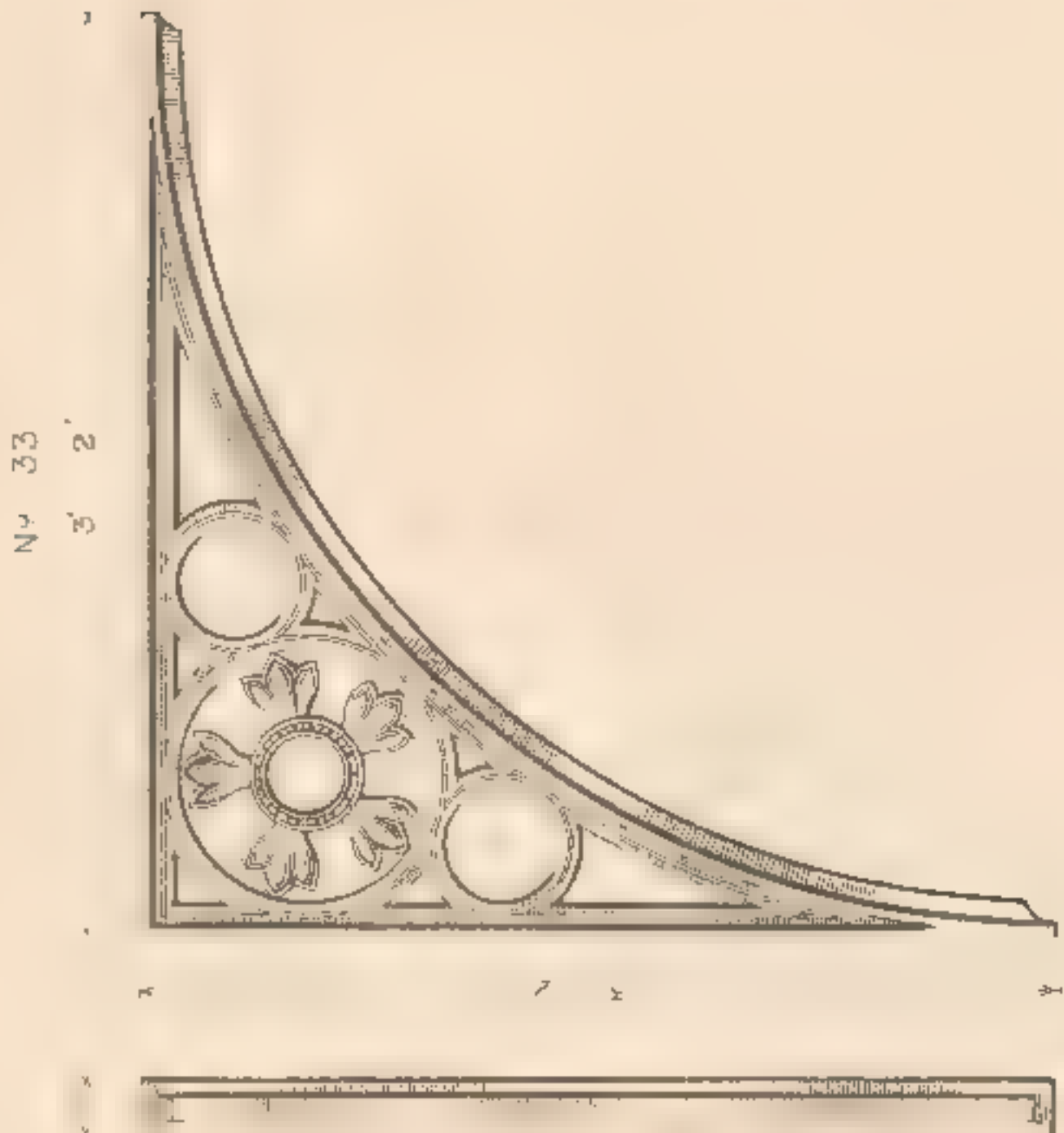
SCALE 1 INCH = 1 FOOT

MACFARLANE'S BRACKETS AND SPANDR LS



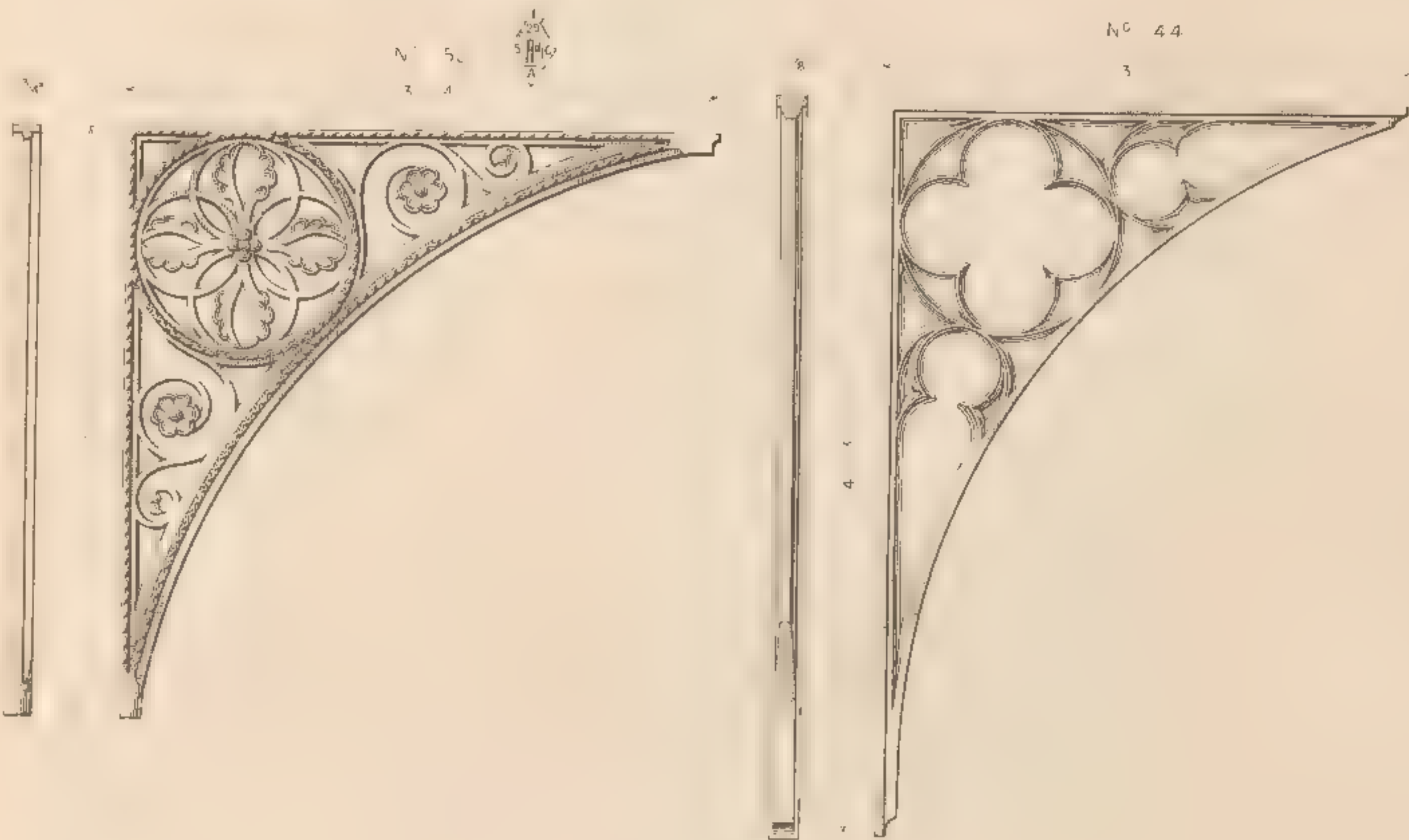
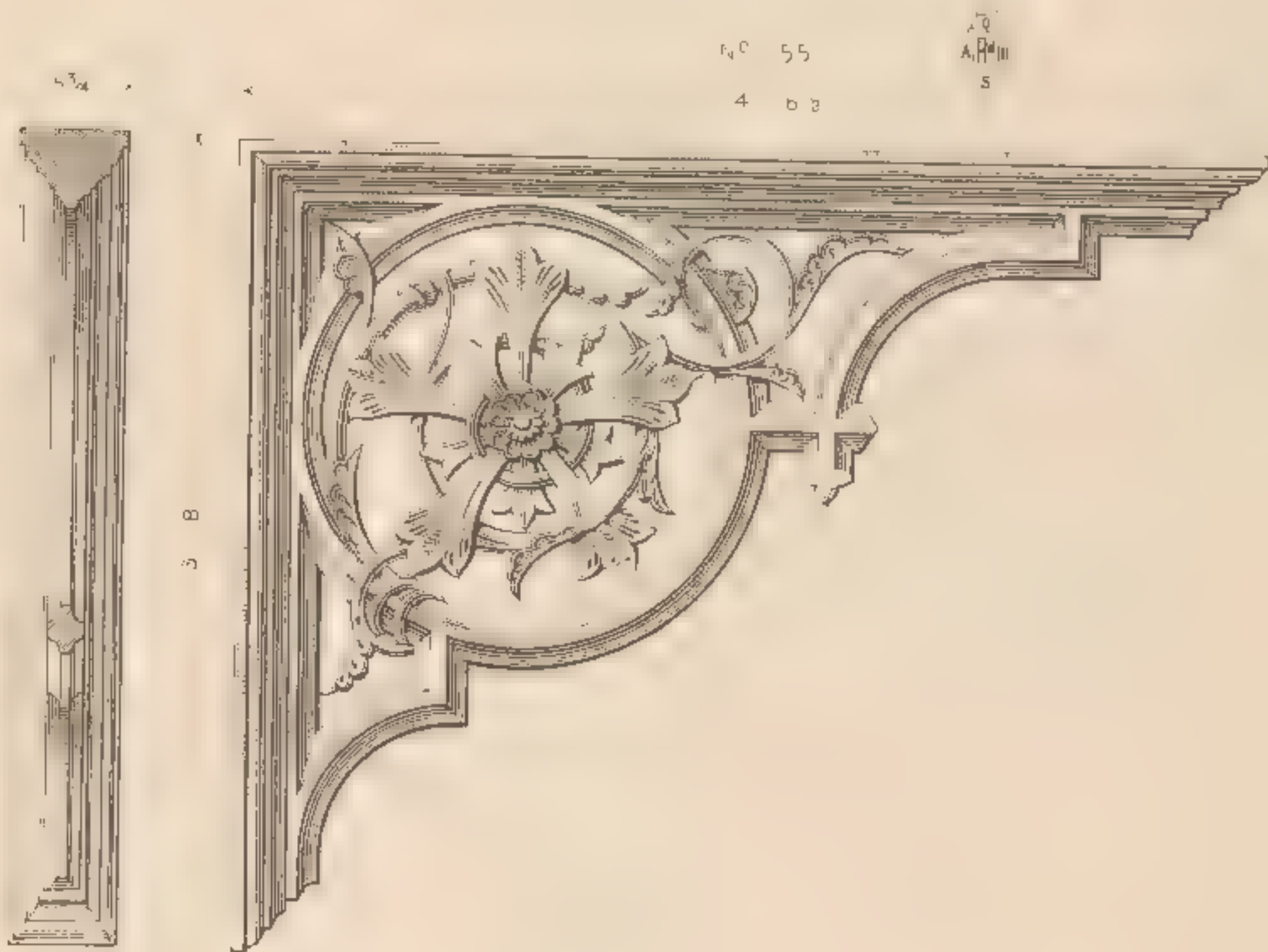
SCALE 1 INCH = 1 FOOT

MA FAR ANE'S BRACKETS ... SPANDR ...



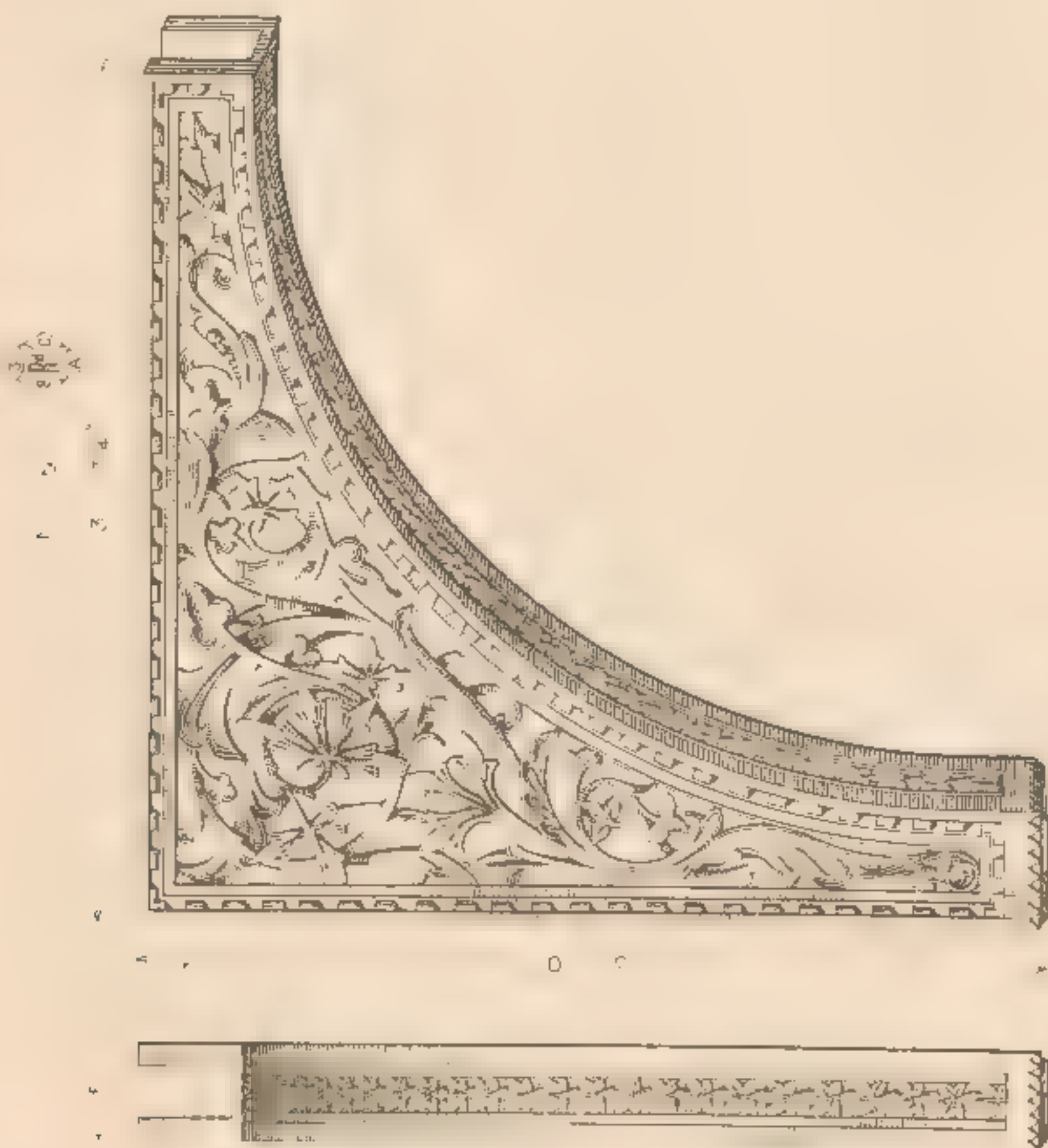
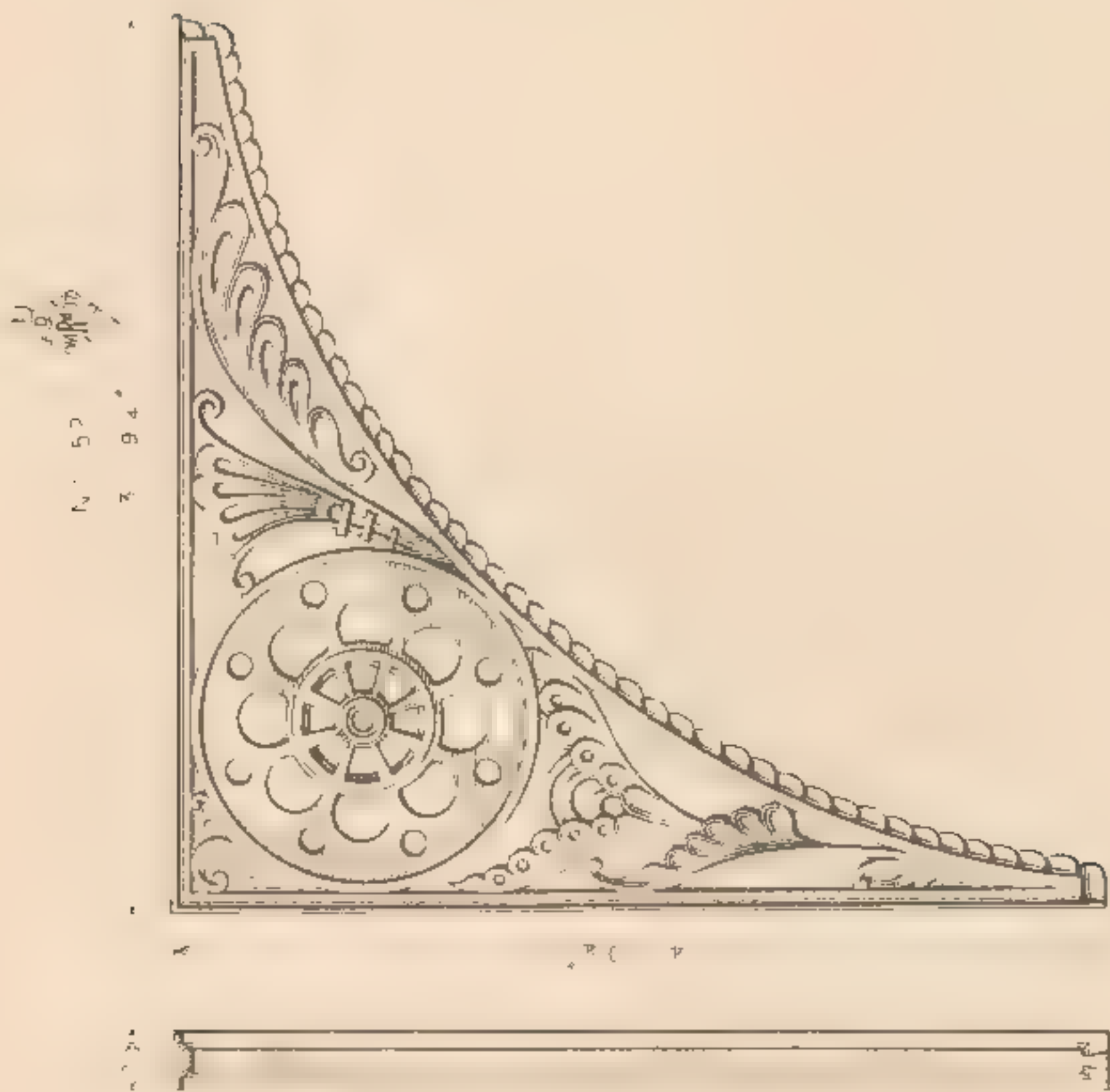
C A E

MACFARLANE'S BRACKETS AND SPANDR LS



SCALE INCH = 1 FOOT

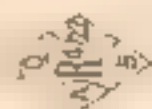
MACFARLANE'S BRACKETS AND SPANDRILS



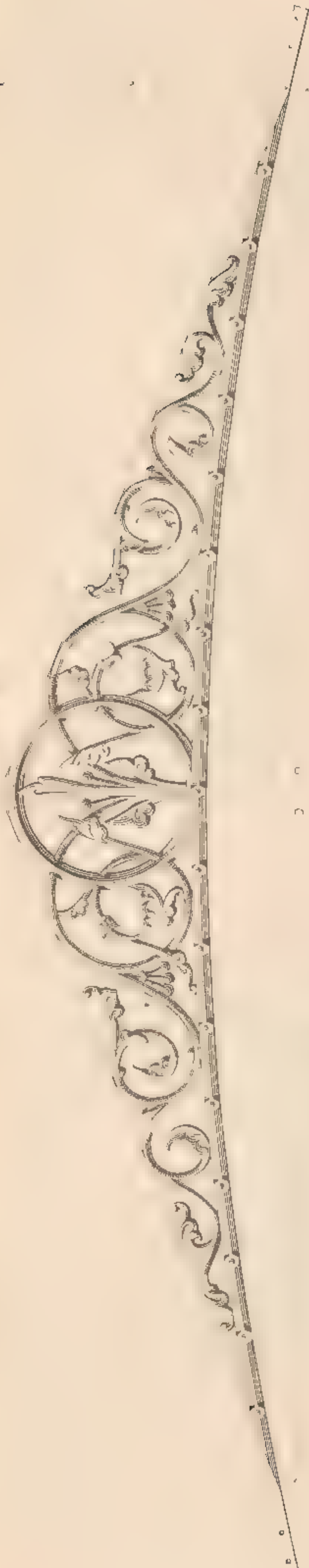
N. 57
2 0



SCALE | INCH — | FOOT

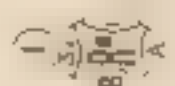


Nº 57



Nº 58

6 2



Nº 59

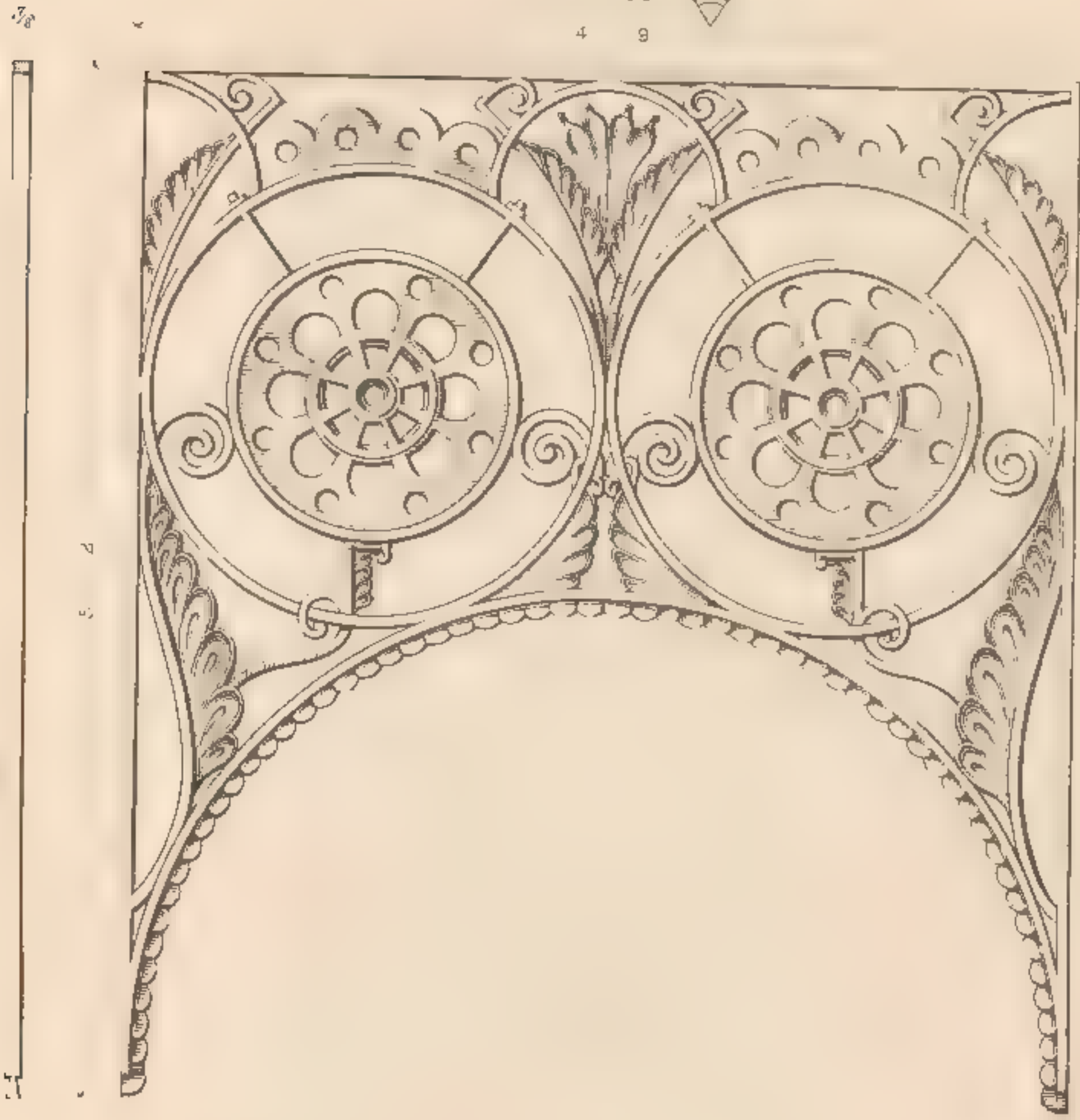
4 2



SCALE 1 INCH = 1 FOOT

MACFARLANE'S BRACKETS AND SPANDRILS

No 56
4 9

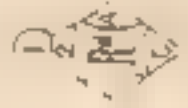


No 59
7 0 1/2



Scale 1 inch = 1 foot

MACFARLANE'S BRACKETS AND SPANDRILS



3 x 4

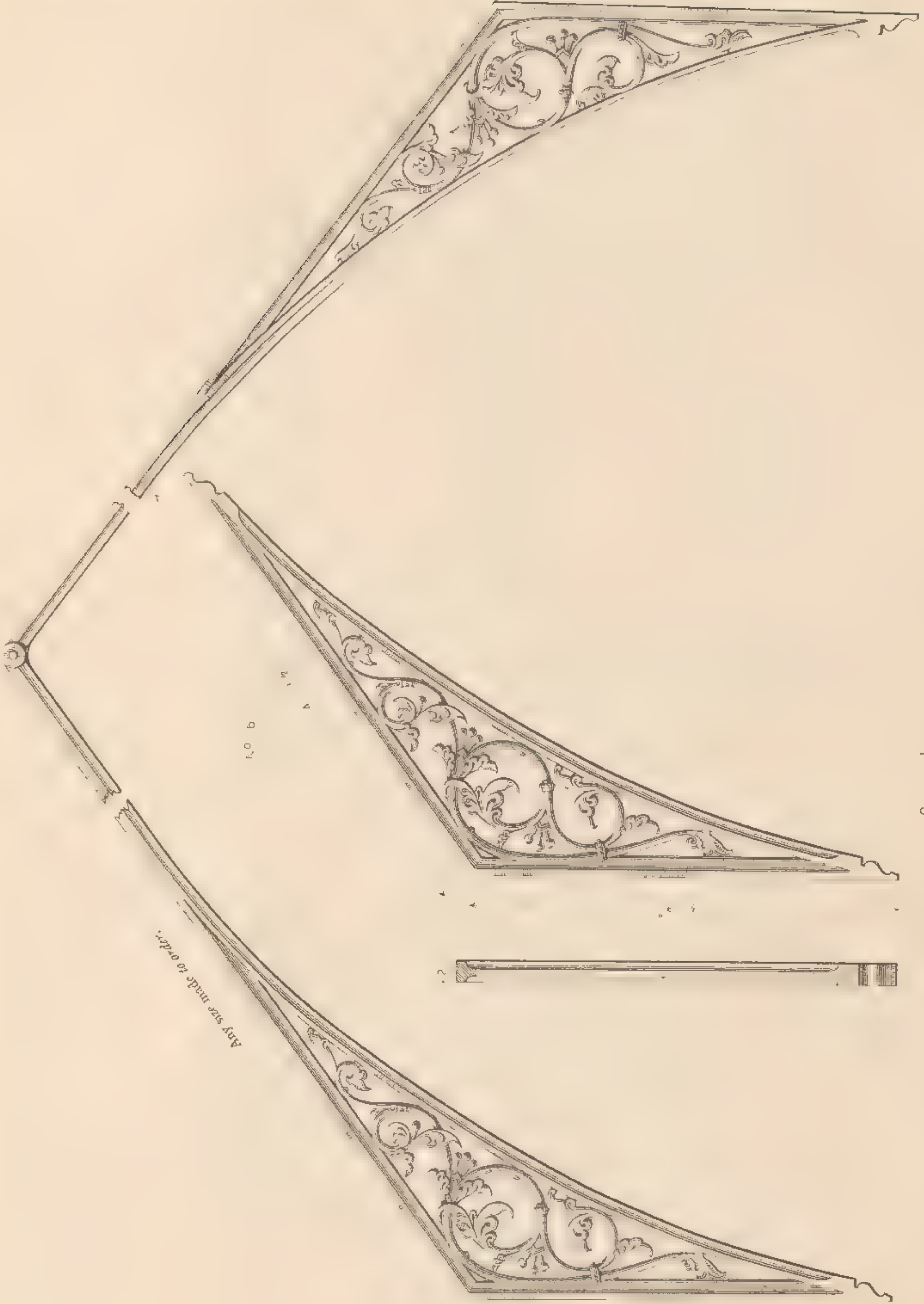


6 2

SCALE 1 INCH = 1 FOOT

MACFARLANE'S BRACKETS AND SPANDRILS

No 61



SCALE 1 INCH = 1 FOOT

MACFARLANE'S ORNAMENTAL TRUSSES

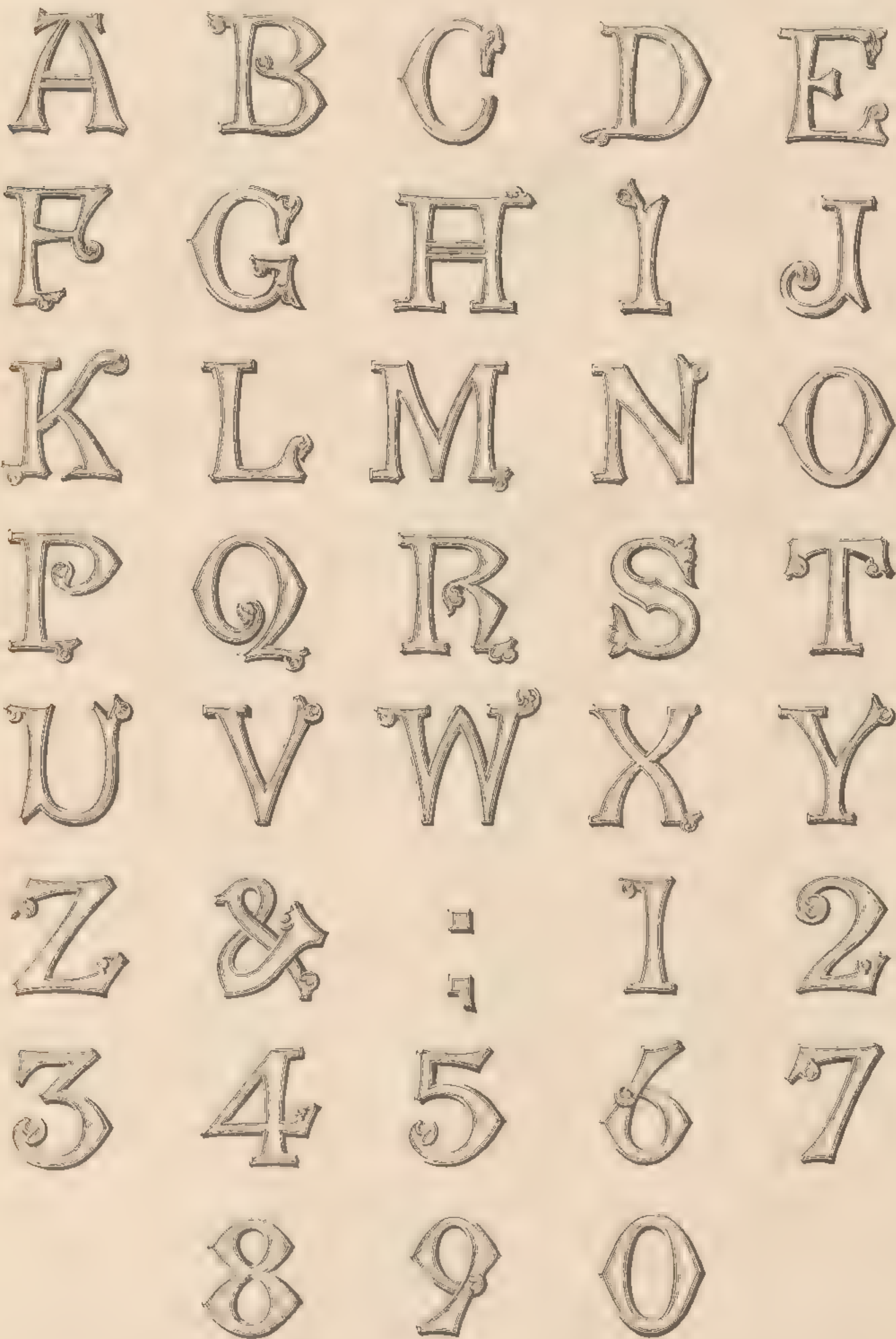


SECTION VIII—SIGN LETTERS.

529

MACFARLANE'S SIGN LETTERS, NUMERALS, & TABLETS

Our Sign Letters and Numerals may be used in connection with wood, stone, or other material for Sign Boards, Door and Pew Numbers, &c.
Sizes—2, 2½, 3, 4, 6, 9, 12, 16, 20, and 24 inches. Other sizes *to order*



MACFARLANE'S TABLETS &C

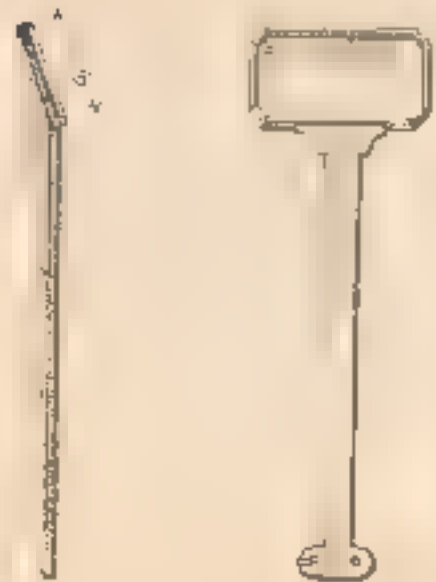
No 4
BOTANICAL TABLET



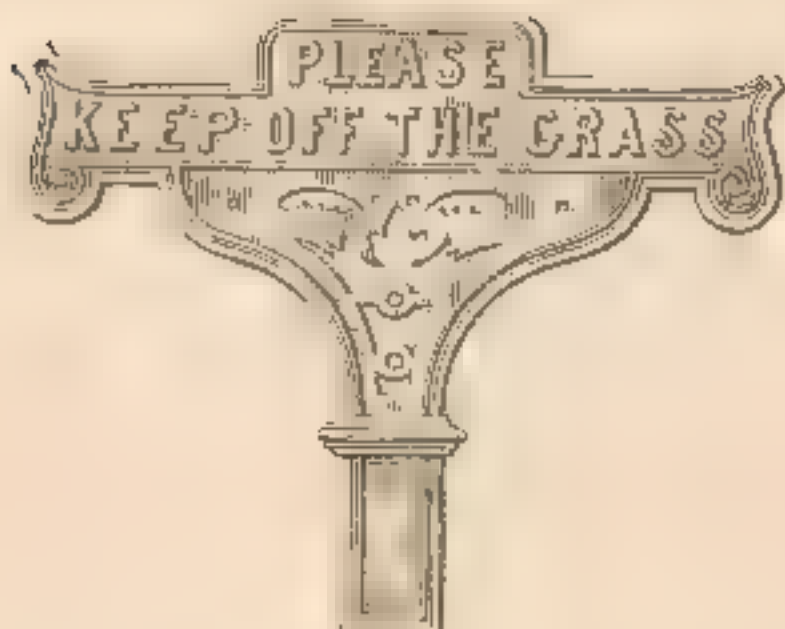
No 4
BOTANICAL TABLET
6"



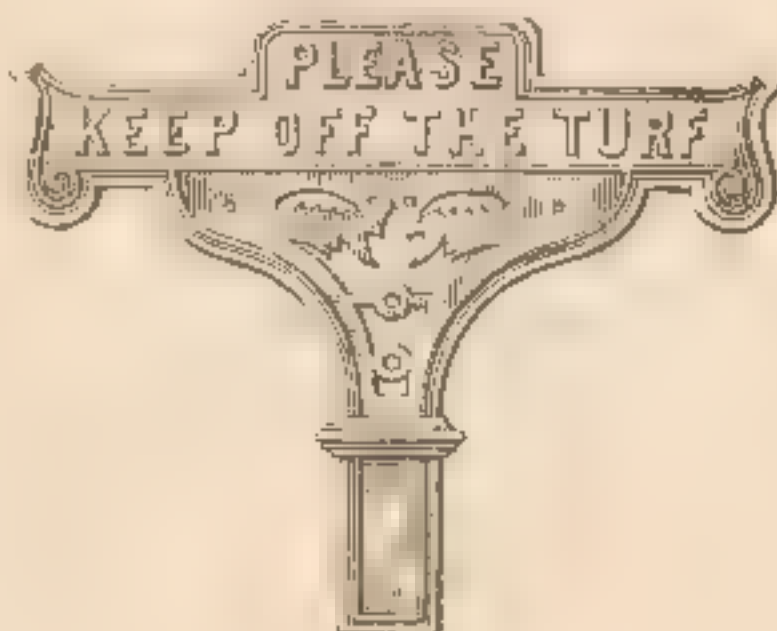
No 5
BOTANICAL TABLET
6"



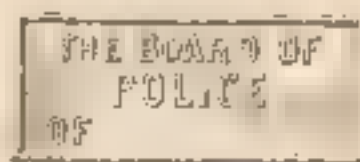
No



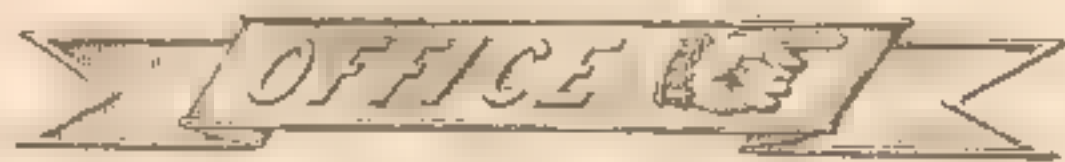
No 2



No 6

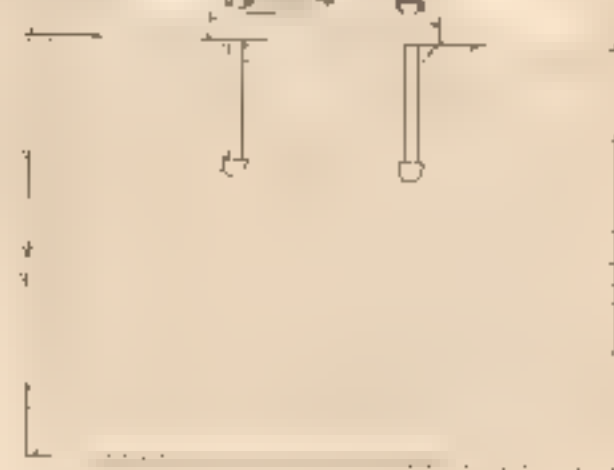


The name of any place can be added to order.



Any word can be substituted to order

No 3



SCALE 1 INCH = FOOT

SECTION IX. DESK, &c., STANDARDS.

MACFARLANE'S DESK, BENCH, TABLE, CHAIR AND SETTEE STANDARDS, INK WELLS, &c

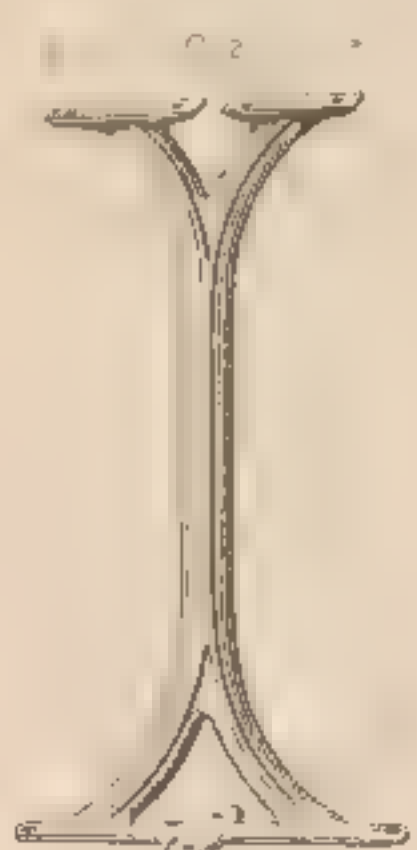
Much improvement has of late years been made in the seating of Schools, Halls, Churches, Dining Rooms, Saloons, Parks, Gardens, Esplanades, &c., and we refer to the following illustrations as an evidence of the attention this branch of trade has received from us. There can be no question as to the superiority of cast-iron over every other material for the standards; cleanliness, substantiality, and economy, along with the little room they occupy, are self-evident recommendations. We give several examples showing the standards in connection with the wood work - see pages 536, 537, and 538.

Nº 1 DESK STANDARD



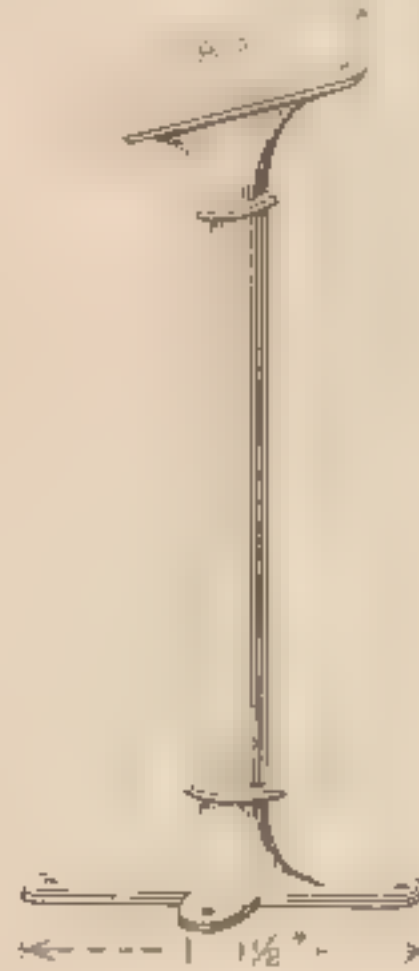
20 2 1/2, 23, 24 1/2, 26 27 1/2 & 28 INS HIGH OVER WOOD SEE EXAMPLE OF Nº 3 DESK & BENCH STº PAGE 536

Nº 2 DESK STANDARD



20, 2 1/2, 23, 24 1/2, 26 27 1/2 & 29 INS HIGH OVER WOOD SEE EXAMPLE OF Nº 3 DESK & BENCH STº PAGE 536

Nº 26 DESK STANDARD



30 INS HIGH OVER WOOD

Nº 9 DESK STANDARD FOR BOOKSHELF



26 27 1/2 & 29 INS HIGH OVER WOOD SEE EXAMPLE OF Nº 16 DESK & BENCH STº FOR BOOK SHELF PAGE 536

Nº 20 DESK STANDARD



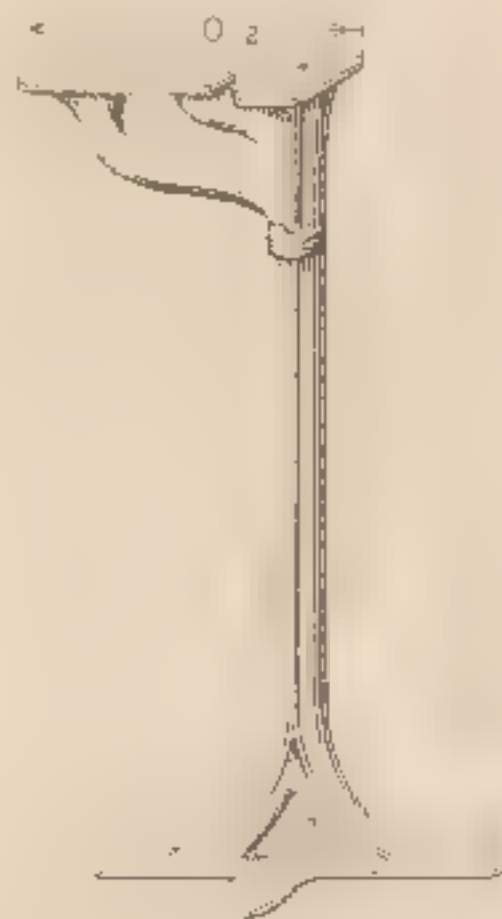
47 INS HIGH OVER WOOD

Nº 5 FOLDING DESK STANDARD



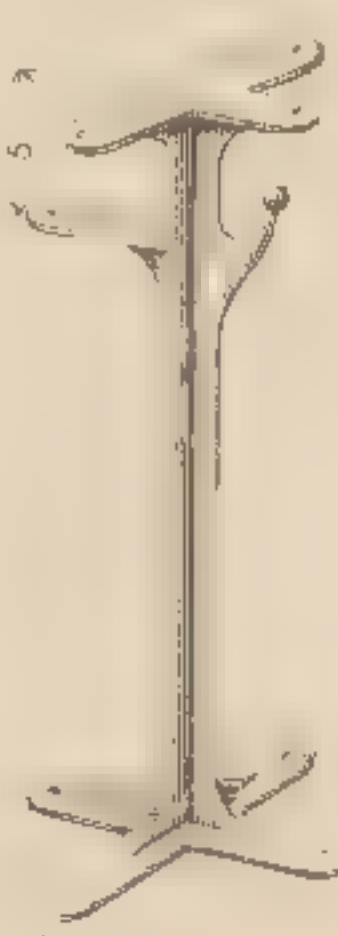
26 27 1/2 & 29 INS HIGH OVER WOOD SEE EXAMPLE OF Nº 7 FOLDING DESK & BENCH STº PAGE 537

Nº 4 FOLDING DESK STANDARD



26, 27 1/2, 28 & 31 INS HIGH OVER WOOD SEE EXAMPLE OF Nº 7 FOLDING DESK & BENCH STº PAGE 537

Nº 10 SINGLE DESK AND BOOKSHELF STANDARD WITH HOOK



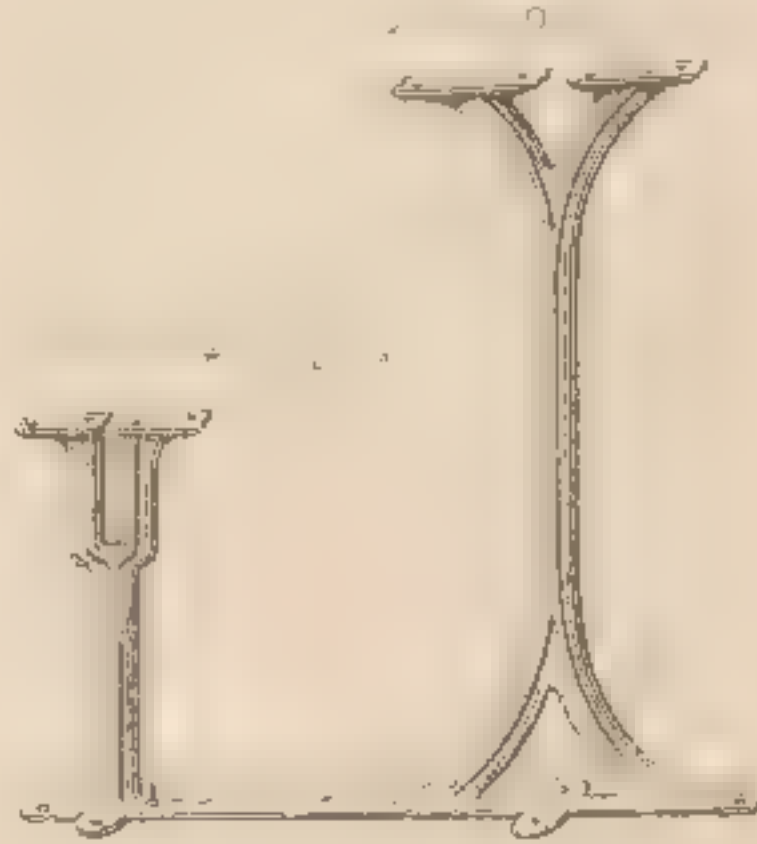
26 27 1/2 & 29 INS HIGH OVER WOOD SEE EXAMPLE PAGE 537

Nº 3 DESK & BENCH STANDARD



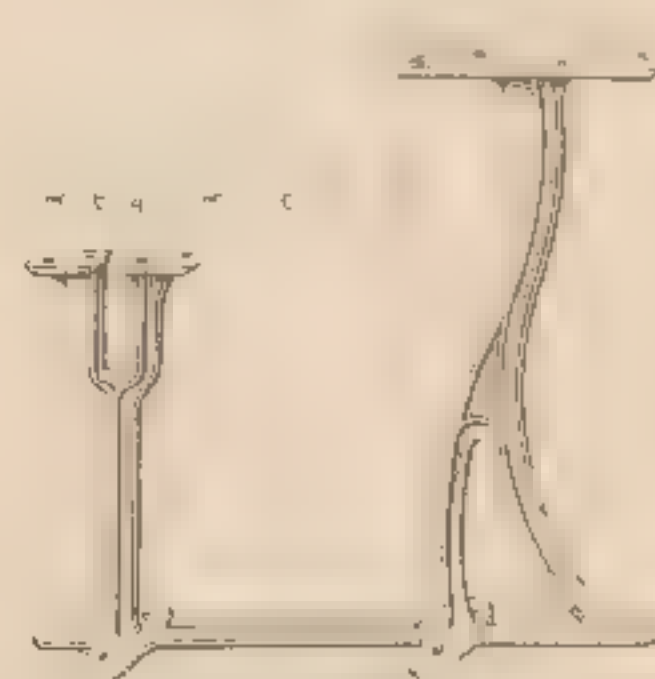
6 1/2, 4 27 1/2, 5 & 28 x 6 INS HIGH OVER WOOD SEE EXAMPLE PAGE 536

Nº 4 DESK & BENCH STANDARD



26 x 14 27 1/2 x 15 & 28 x 18 INS HIGH OVER WOOD SEE EXAMPLE OF Nº 3 DESK & BENCH STº PAGE 536

Nº 15 DESK & BENCH STANDARD FOR BOOKSHELF

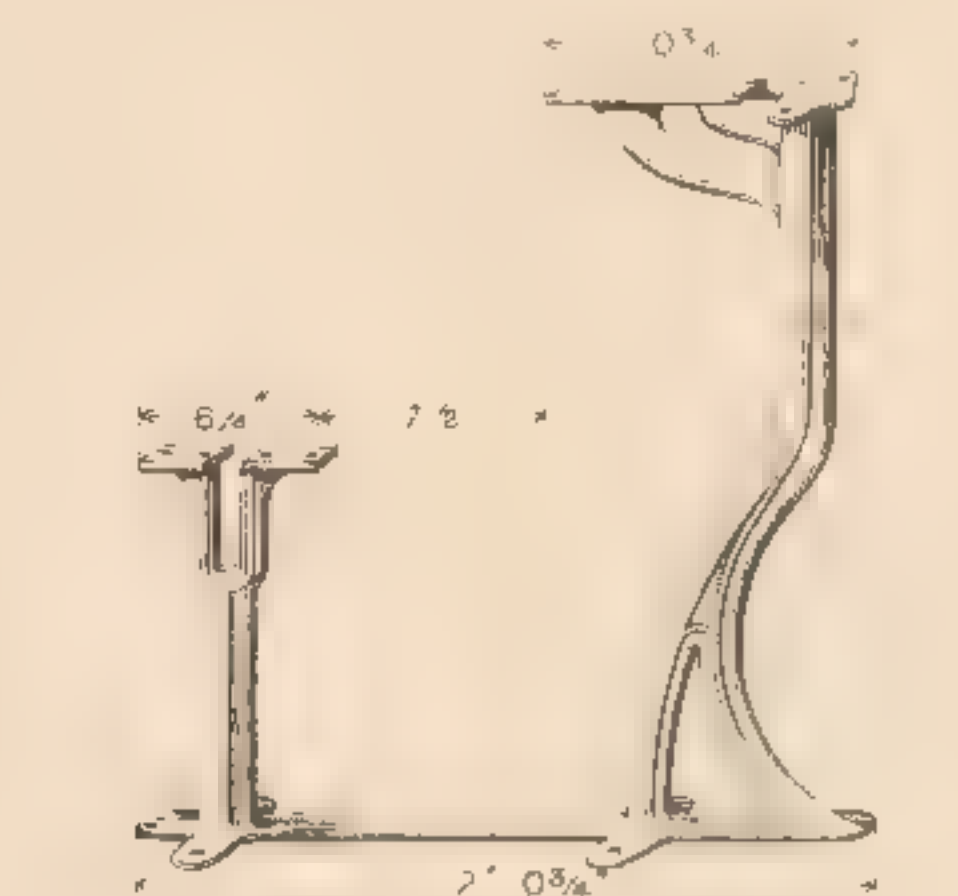


26 x 4 27 1/2 x 15 & 28 x 18 INS HIGH OVER WOOD SEE EXAMPLE PAGE 536

SCALE 1 INCH = 1 FOOT

MACFARLANE'S DESK, BENCH, TABLE, CHAIR AND SETTEE STANDARDS, N^o WELLS, &c

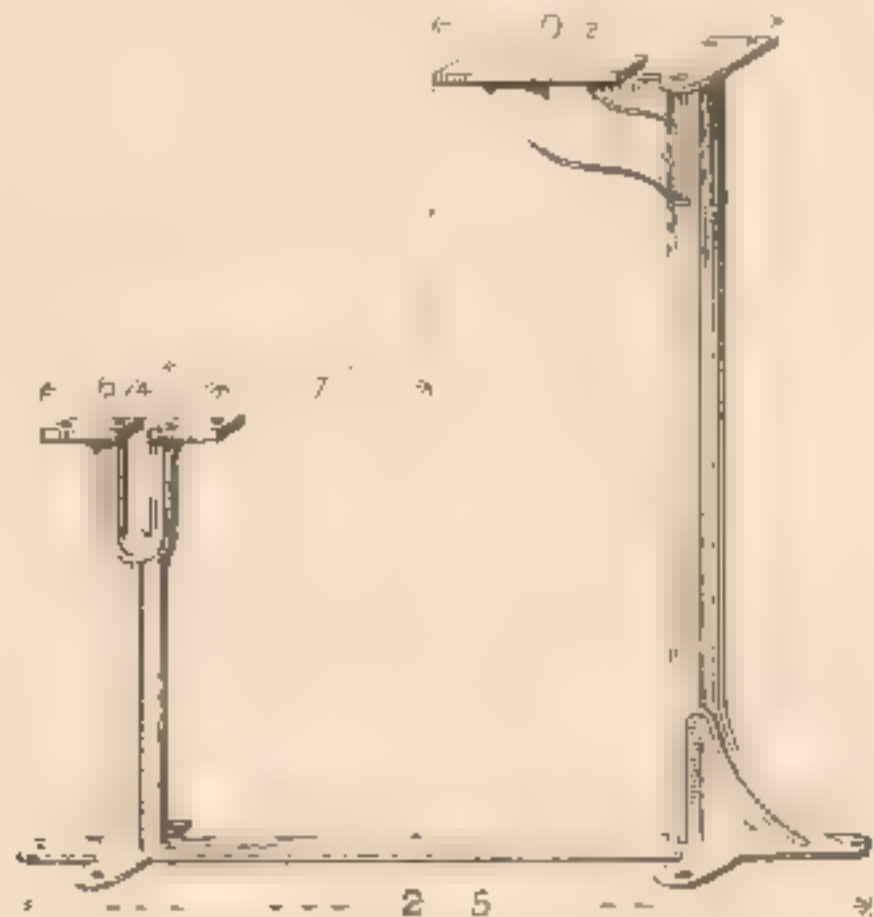
N^o 16 FOLDING DESK & BENCH STANDARD



26 x 4 27 1/2 x 15 & 29 x 16 1/2 1/2 H^oGH OVER WOOD
SEE EXAMPLE OF N^o 7 FOLDING DESK & BENCH ST^o PAGE 537

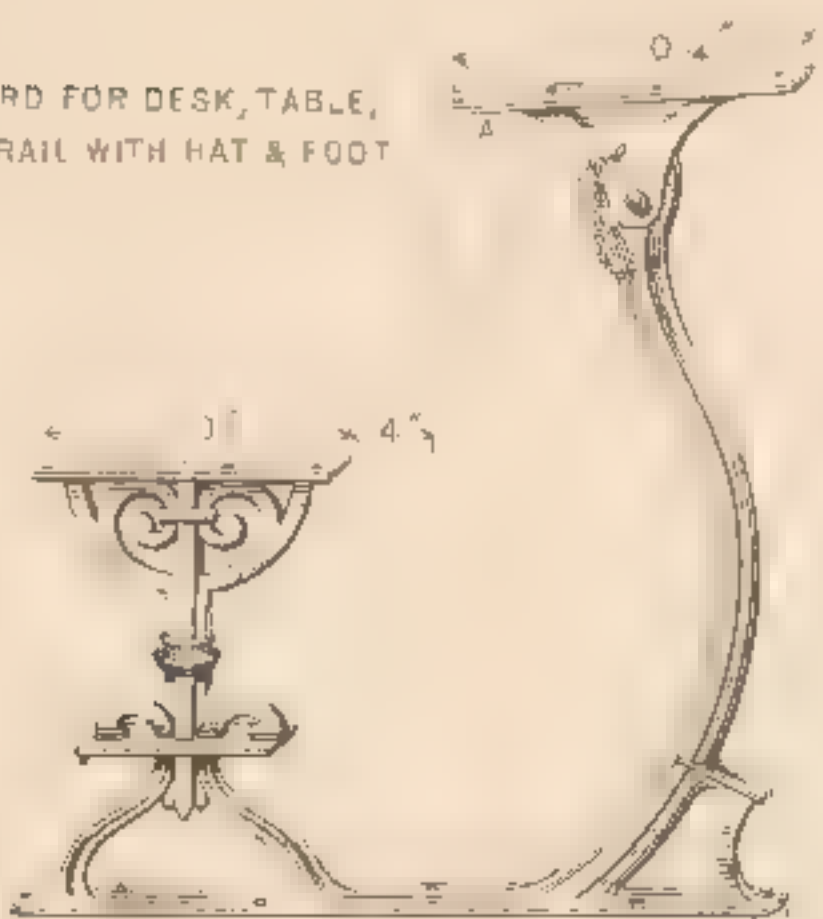
BACK VIEW
OF TOP

N^o 17 FOLDING DESK & BENCH STANDARD



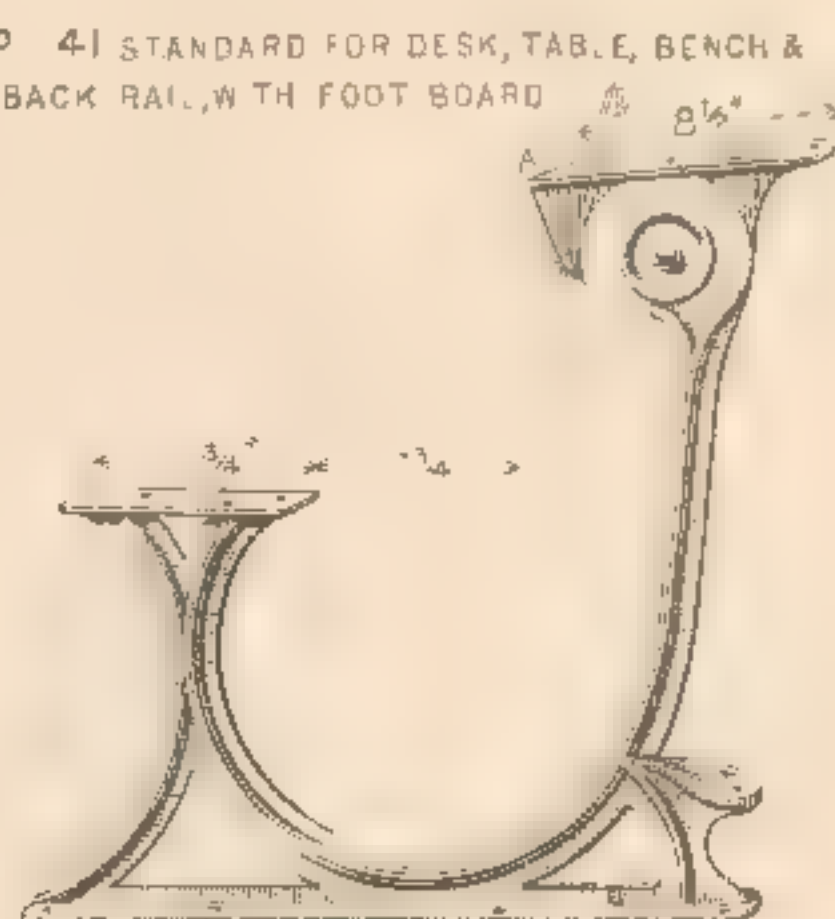
27 1/2 x 15 29 x 16 & 3 1/2 x 7 1/2 H^oGH OVER WOOD
SEE EXAMPLE PAGE 537

N^o 38 STANDARD FOR DESK, TABLE, BENCH & BACK RAIL WITH HAT & FOOT BOARDS



29 x 6 1/2 H^oGH OVER WOOD SEE EXAMPLE PAGE 538

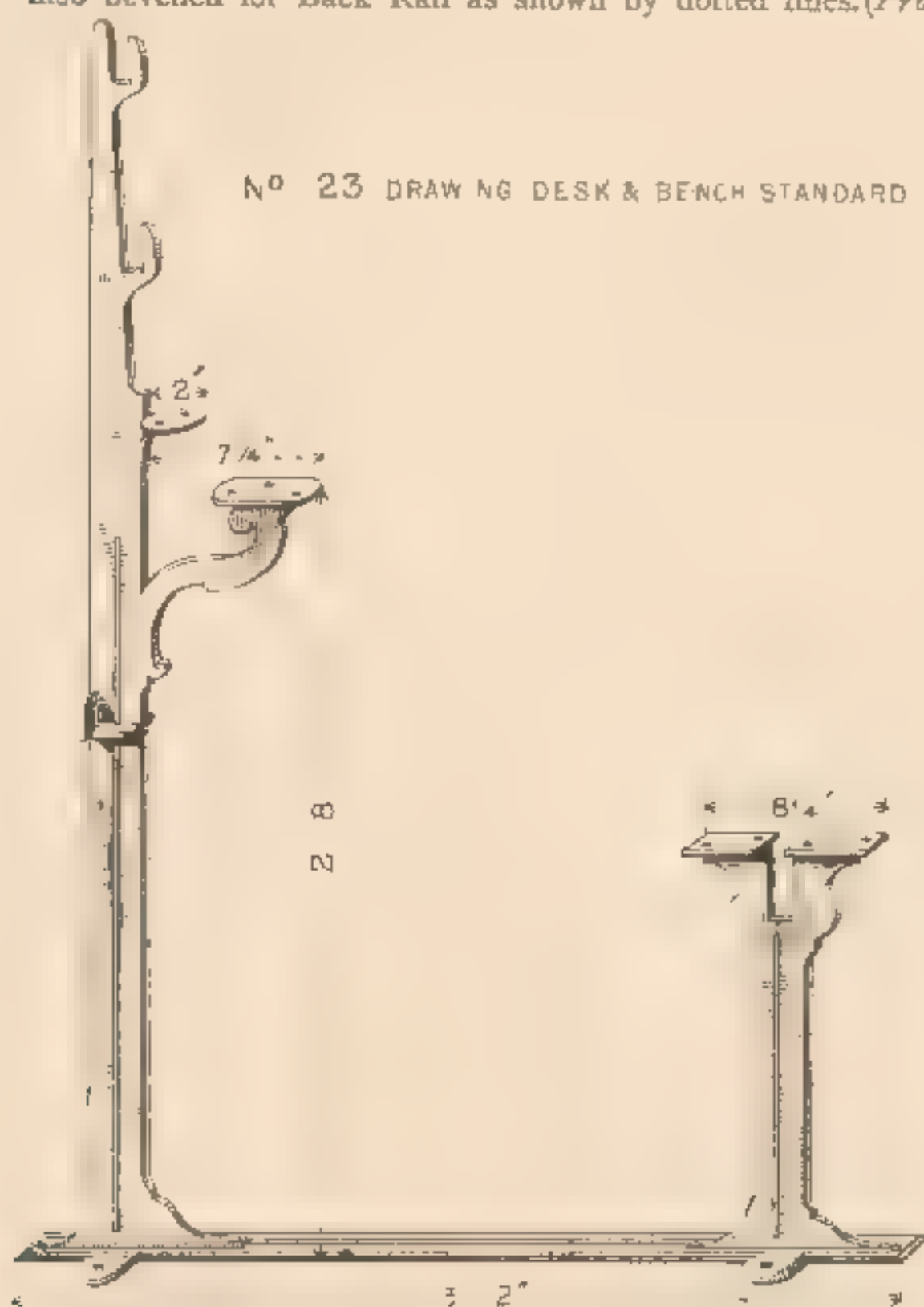
N^o 41 STANDARD FOR DESK, TABLE, BENCH & BACK RAIL, WITH FOOT BOARD



27 x 6 1/2 1/2 H^oGH OVER WOOD SEE EXAMPLE OF N^o 18 ST^o PAGE 538

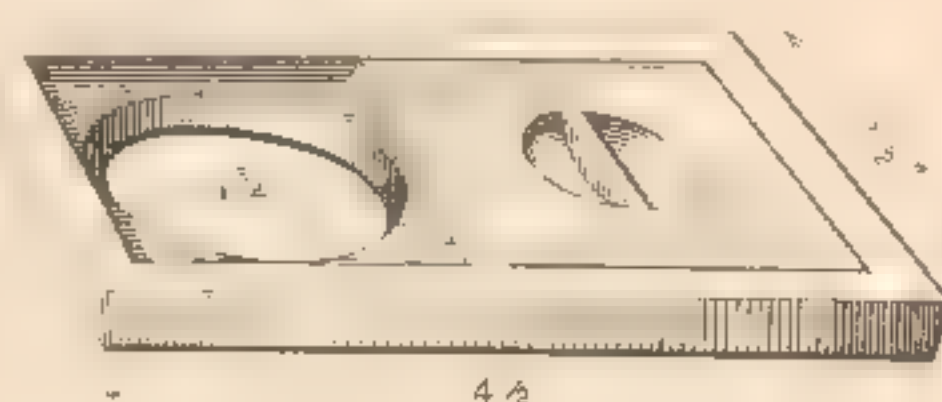
Nos. 38 and 41 Standards.—The movable portion A, shown in the illustrations as Desk, can be set horizontal for Table, and also bevelled for Back Rail as shown by dotted lines. (Provision can also be made for bookboard to order)

N^o 23 DRAWING DESK & BENCH STANDARD



5 x 8 1/2 H^oGH OVER WOOD SEE EXAMPLE PAGE 537

N^o 2 INK WELL COVER

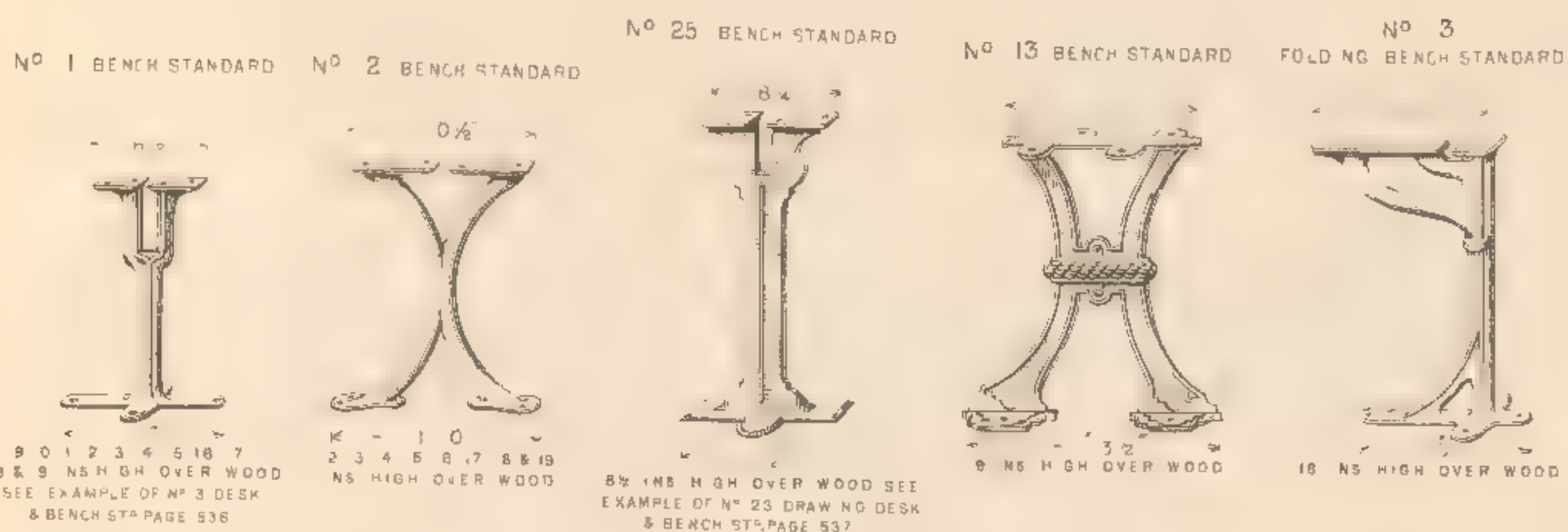


EARTHENWARE INK WELL



SCALE FOR STANDARDS | INCH = | FOOT

MACFARLANE'S DESK, BENCH, TABLE, CHAIR AND SETTEE STANDARDS, NK WELLS, &c



SCALE 1 INCH = FOOT

MACFARLANE'S DESK, BENCH, TABLE, CHAIR AND SETTEE STANDARDS, INK WELLS, &c

No 5 BENCH STANDARD FOR BOOK BOARD



18 IN 30 INS HIGH OVER WOOD
SEE EXAMPLE PAGE 538

No 7 BENCH STANDARD FOR FOLDING BOOK BOARD



18 X 30 INS HIGH OVER WOOD

No 8 FOLDING BENCH AND FOLDING BOOK BOARD STANDARD



18 X 30 INS HIGH OVER WOOD

No 19 BENCH AND TABLE STANDARD



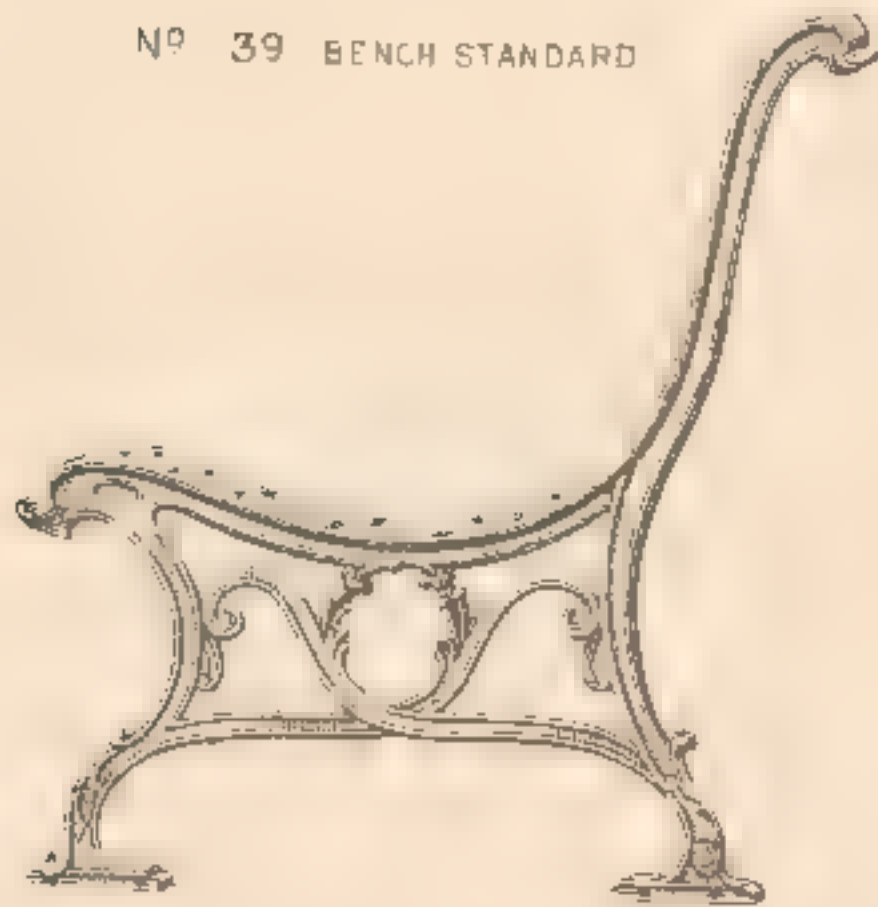
18 X 30 INS HIGH OVER WOOD
SEE EXAMPLE PAGE 538

No 24 TABLE AND FOLDING BENCH STANDARD



18 X 30 INS HIGH OVER WOOD

No 39 BENCH STANDARD



18 X 30 INS HIGH OVER WOOD

No 40 BENCH STANDARD



18 X 30 INS HIGH OVER WOOD

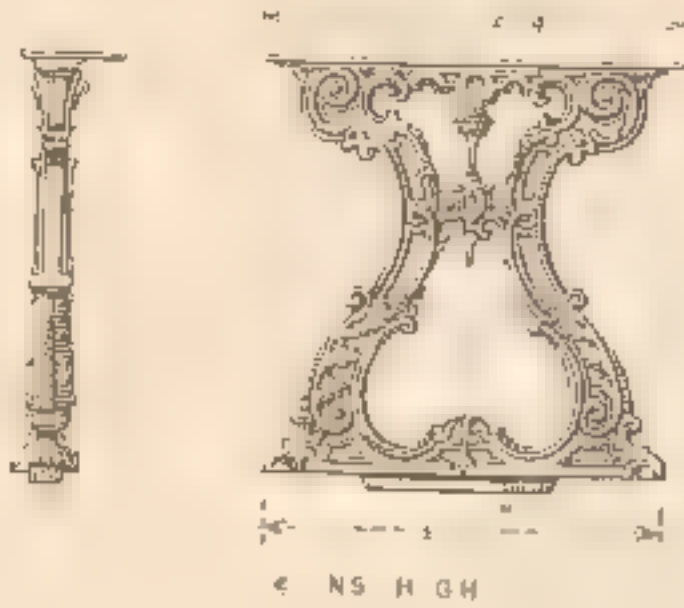
SCALE 1 INCH = 1 FOOT

MACFARLANE'S DESK, BENCH, TABLE, CHAIR AND SETTEE STANDARDS, INK WELLS, &c

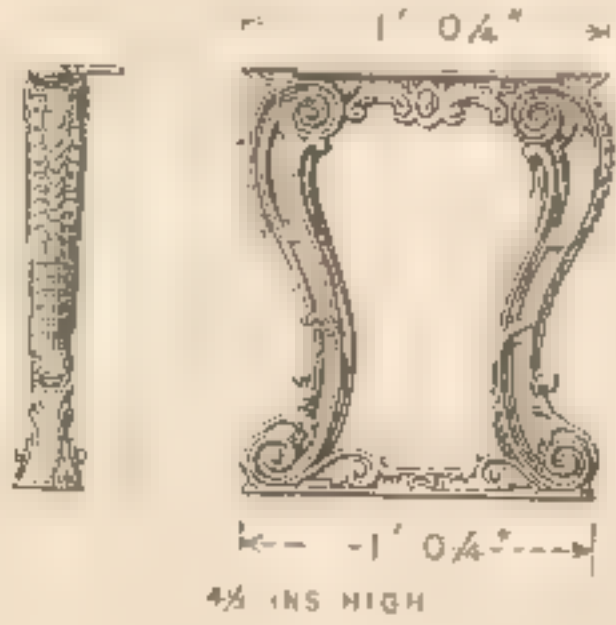
Nº 11 BENCH



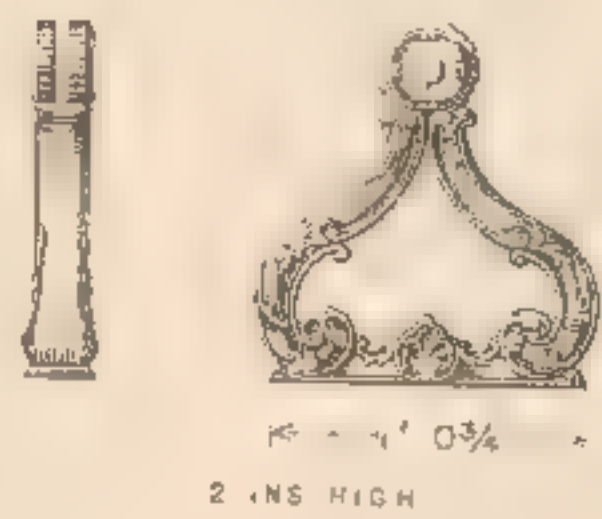
Nº 34 SETTEE STANDARD



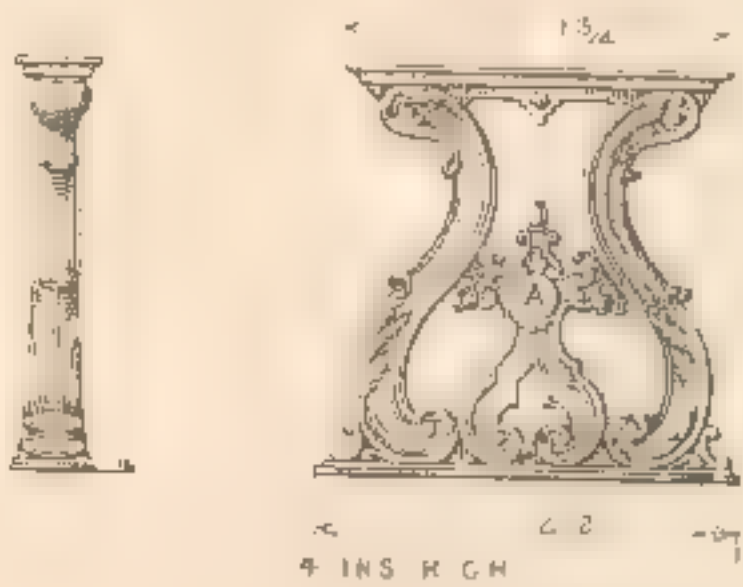
Nº 30 SETTEE STANDARD



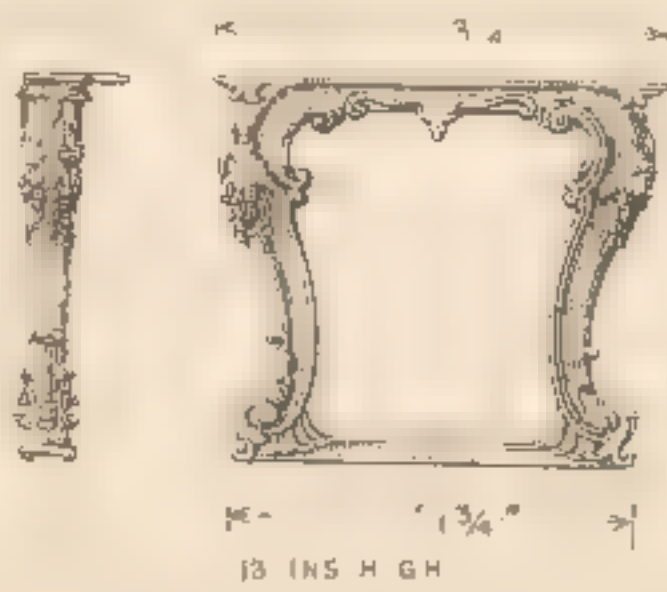
Nº 30 REVERSIBLE BACK RAIL STANDARD FOR SETTEE



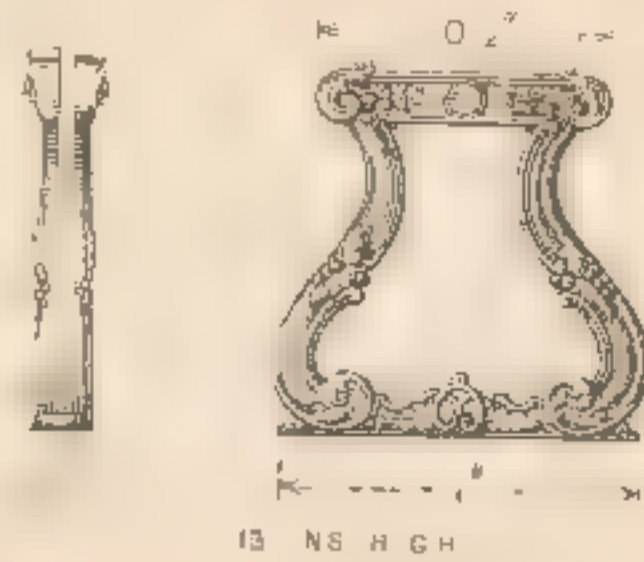
Nº 36 SETTEE STANDARD



Nº 32 SETTEE STANDARD



Nº 32 REVERSIBLE BACK RAIL STANDARD FOR SETTEE



The circular portion A can have a reversible back rail applied.

Nº 33 SETTEE STANDARD



Nº 1 STEP BOARD STANDARD

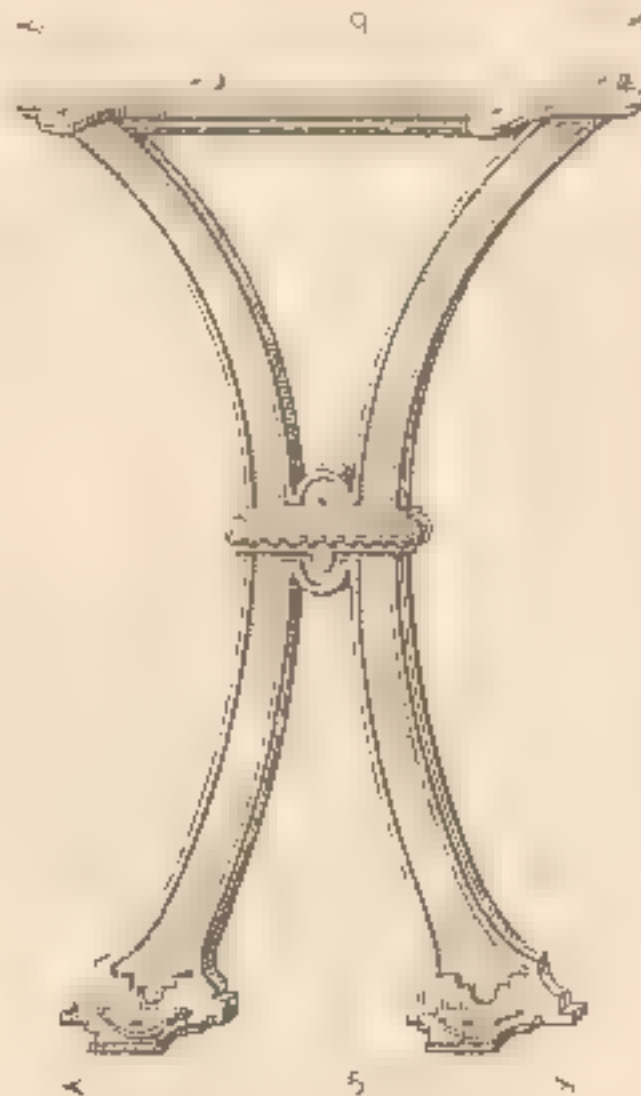


SCALE 1 INCH = 1 FOOT

MACFARLANE'S DESK BENCH TABLE CHAIR AND SETTEE STANDARDS, INK WELLS &c

N^o 6 TABLE STANDARD

24, 26, 28, 30, 32 & 34 NS HIGH OVER WOOD

N^o 28 TABLE STANDARD

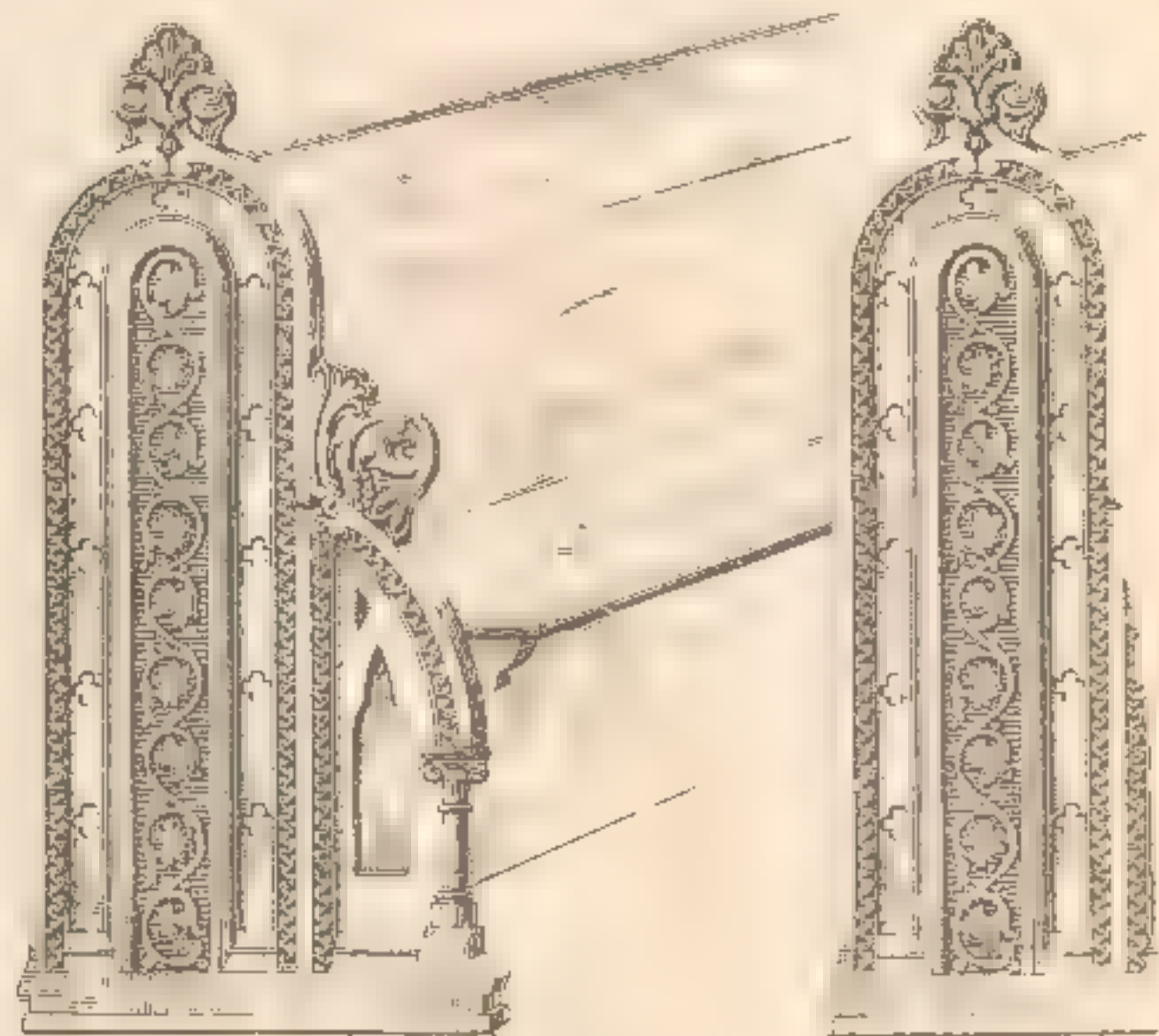
32 INS HIGH OVER WOOD

N^o 29 TABLE STANDARD

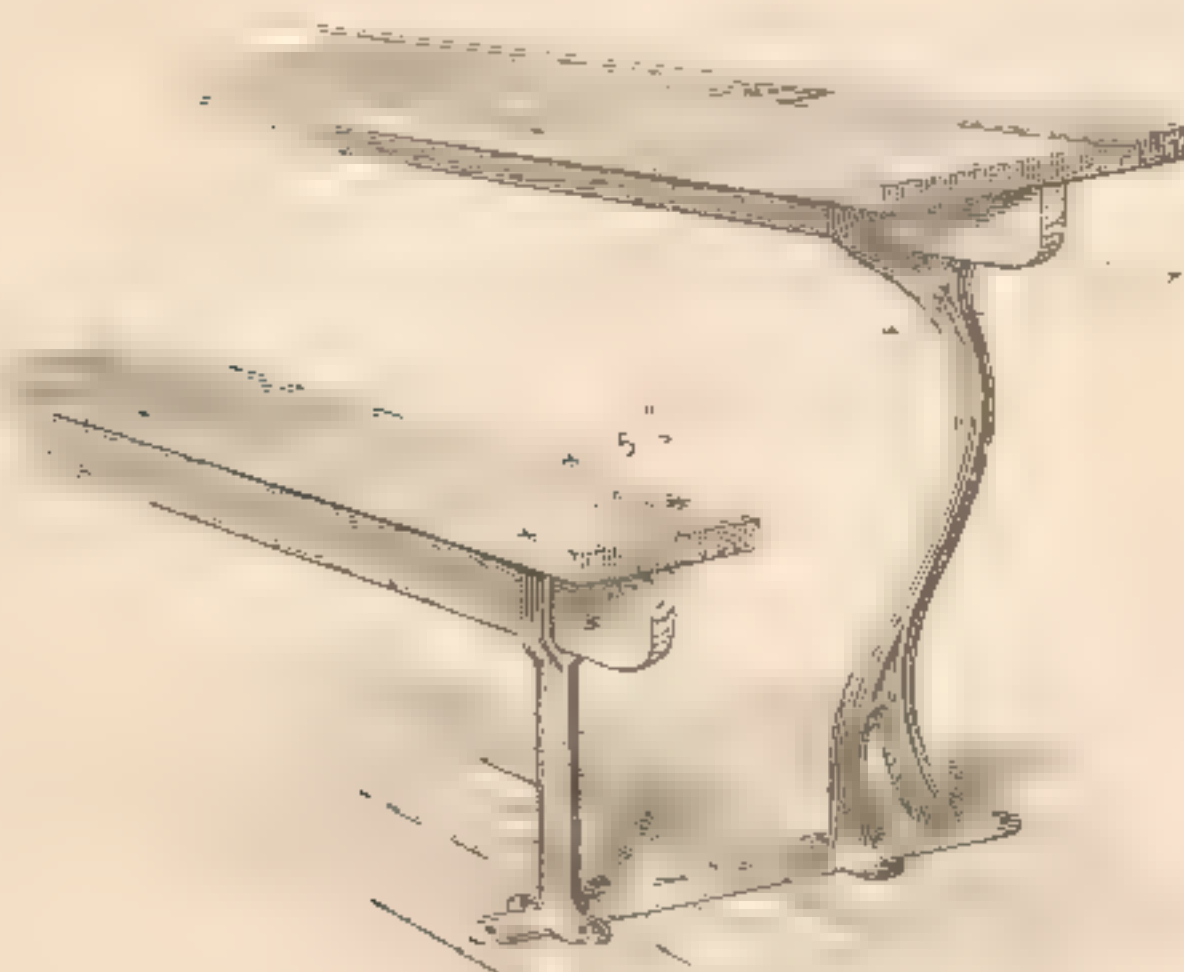
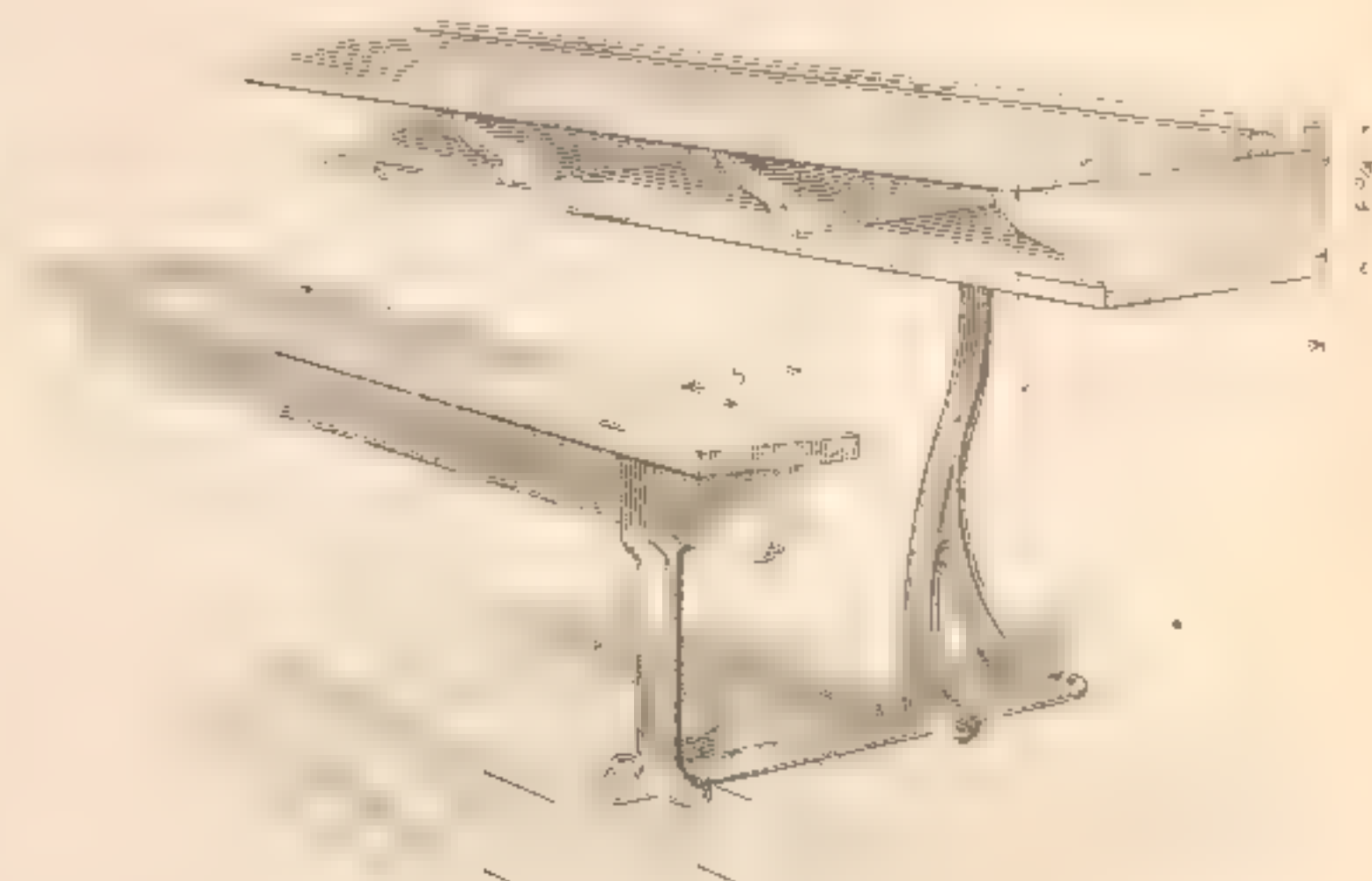
24, 26, 28, 30, 32, & 34 NS HIGH OVER WOOD

N^o 37 TABLE STANDARD

29 1/2 NS HIGH OVER WOOD

N^o 21 PEW END STANDARD

38 INS HIGH

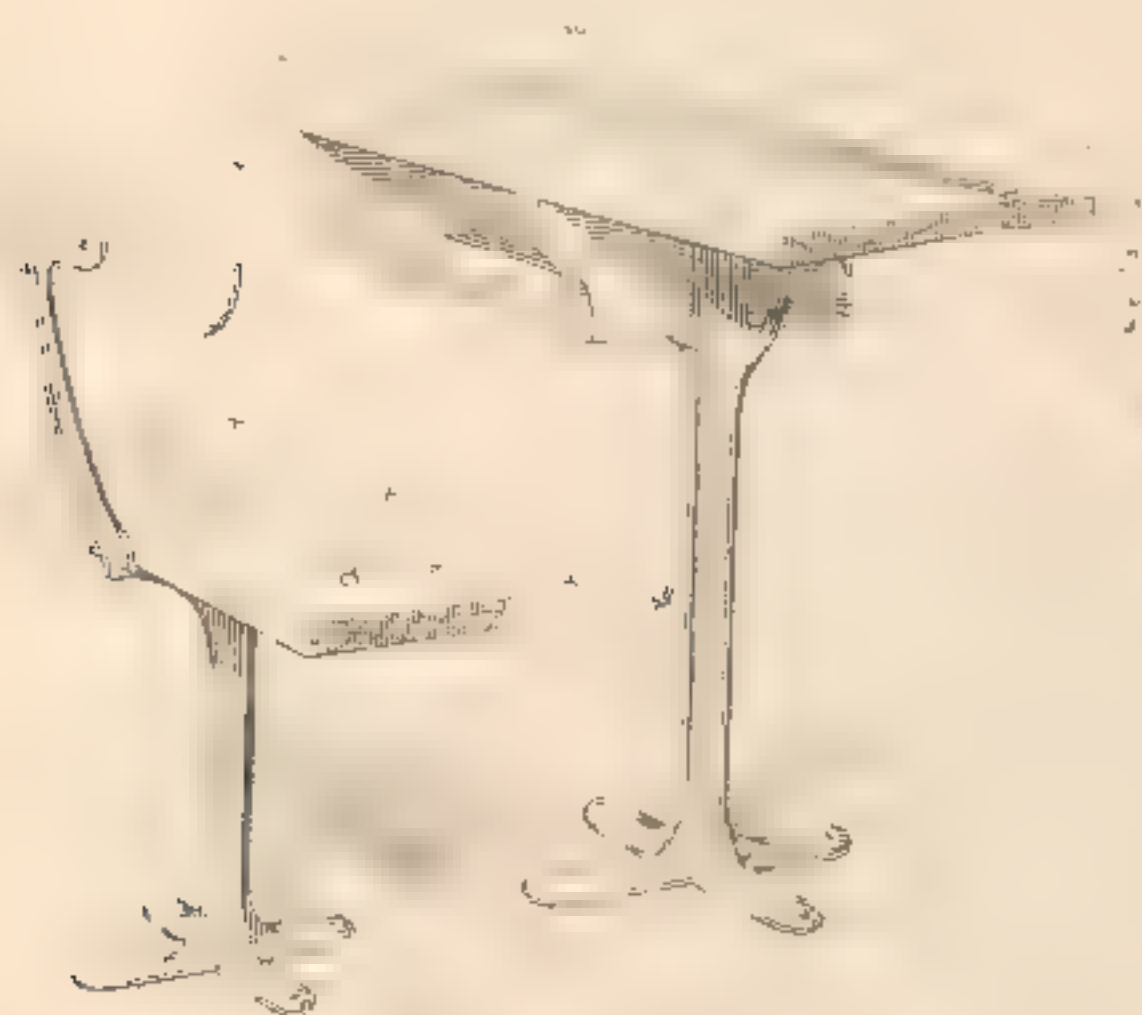
N^o 3 DESK & BENCH WITH N^o 2 INK WELLN^o 15 DESK & BENCH WITH BOOKSHELF & N^o 2 INK WELL

MACFARLANE'S EXAMPLES.—Showing the Standards in connection with the woodwork.

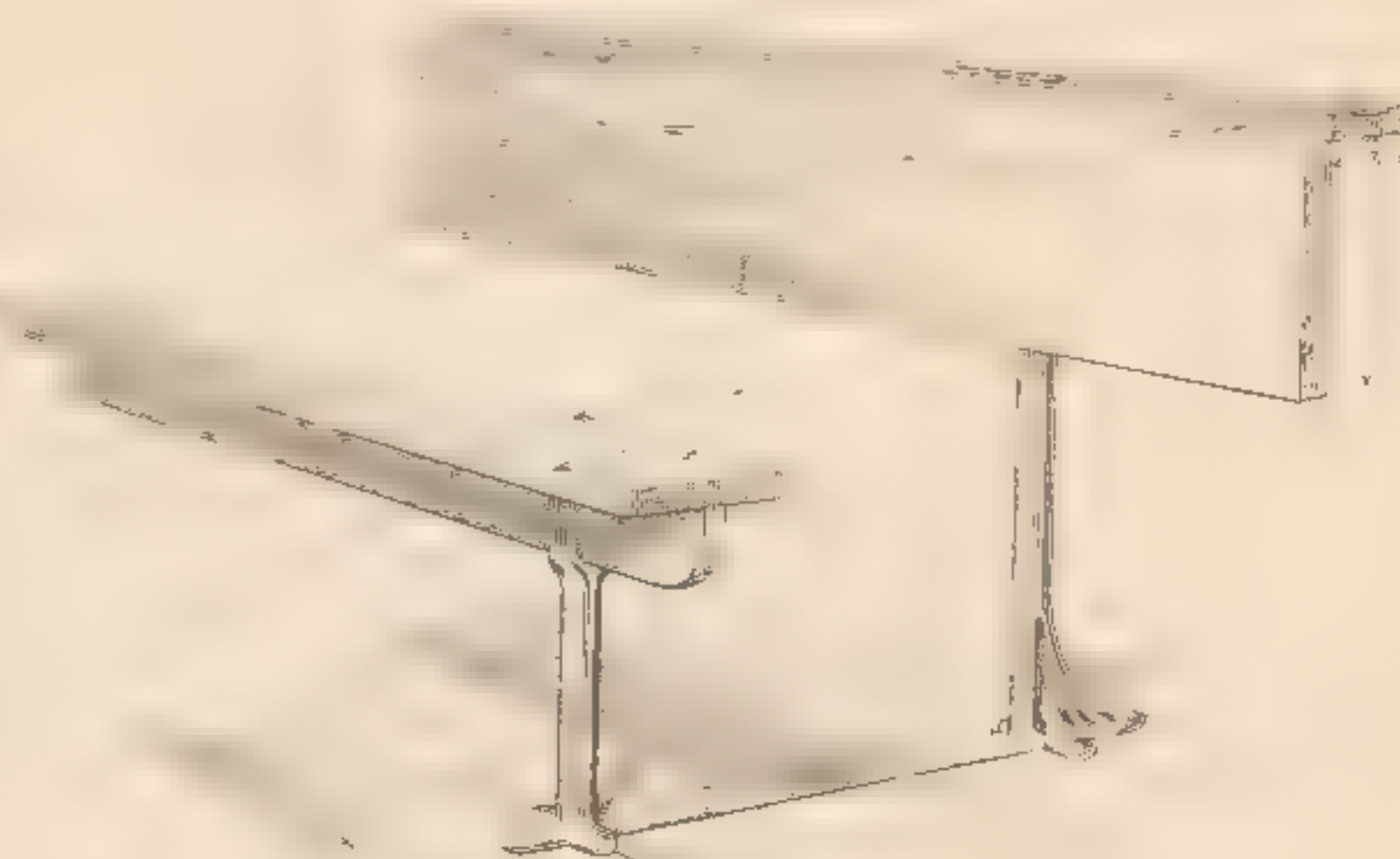
SCALE 1 INCH = 1 FOOT

MACFARLANE'S DESK, BENCH, TABLE, CHAIR AND SETTEE STANDARDS INK WELLS, &c

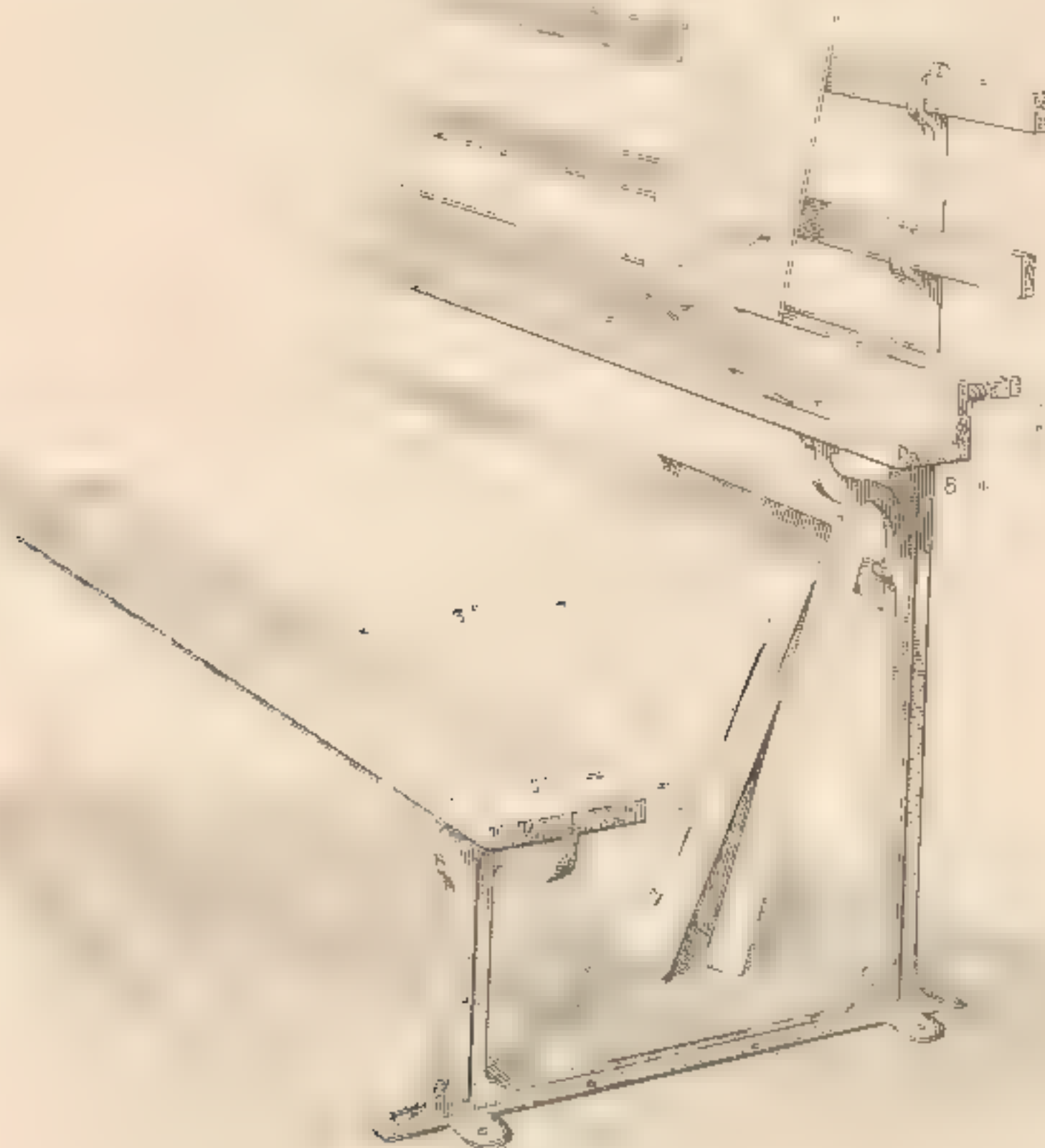
NO 10 JANGLE DESK WITH SHELF & HOOK, NO 18 BENCH
AND NO 2 INK WELL



NO 17 FOLDING DESK & BENCH WITH NO 2 INK WELL



NO 23 DRAWING DESK & BENCH

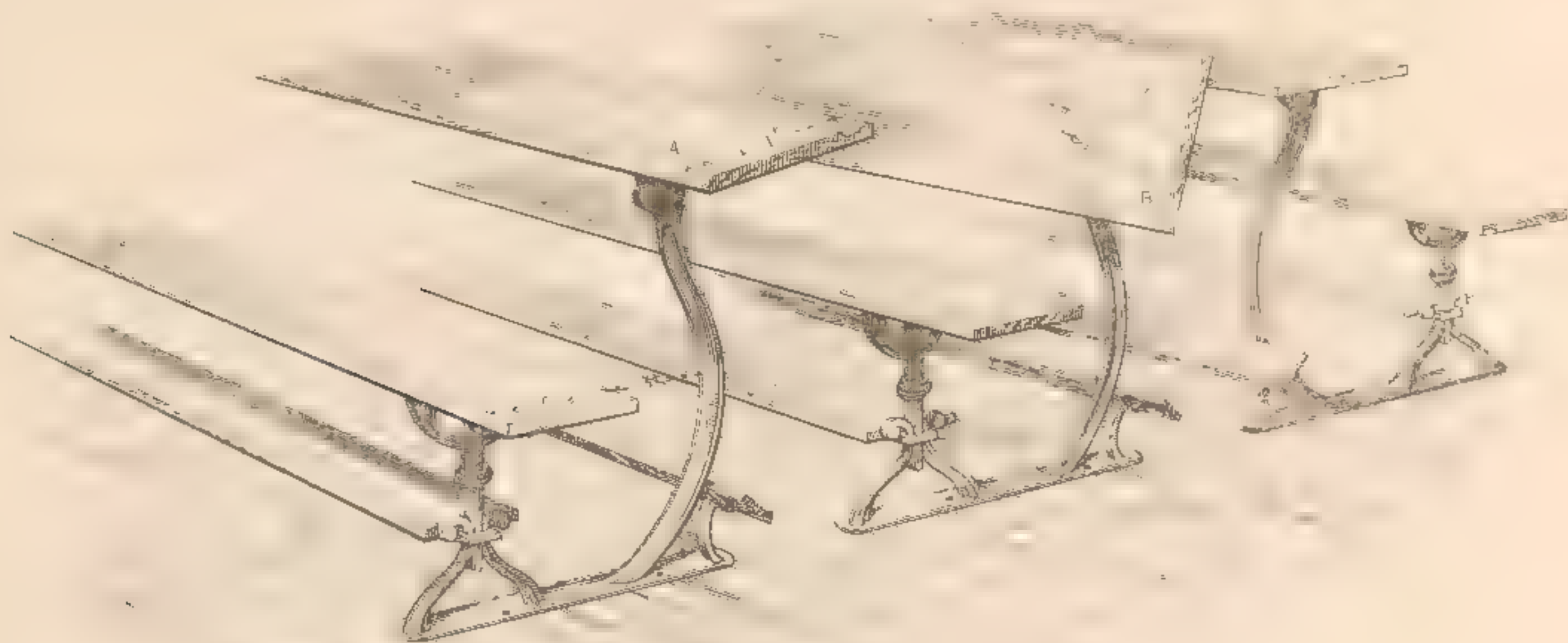


No. 23. The distance between the Standards may be from 5 to 6 feet according to circumstances.

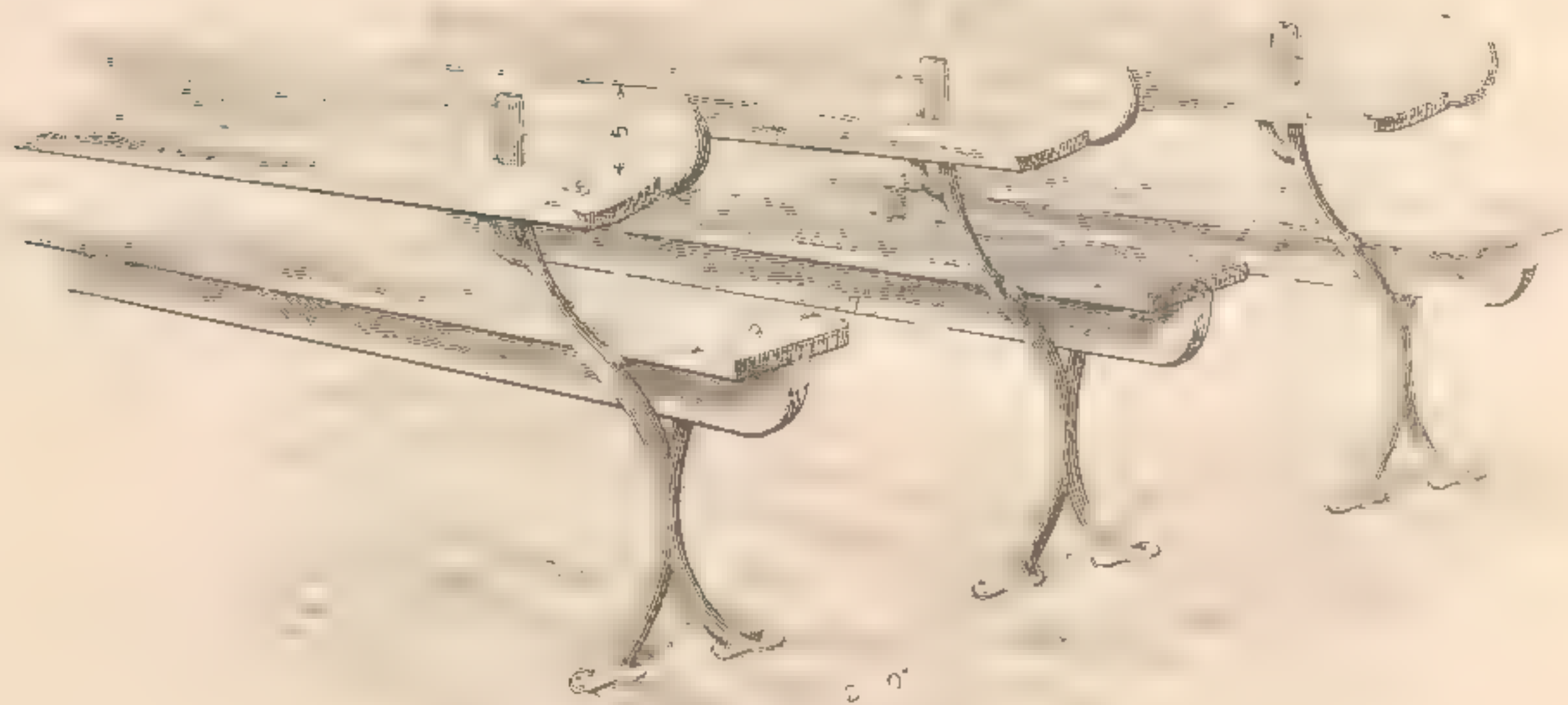
MACFARLANE'S EXAMPLES.—Showing the Standards in connection with the woodwork

SCALE INCH

MACFARLANE'S DESK, BENCH TABLE, CHAIR AND SETTEE STANDARDS, INK WELLS, &c

N^o 38 DESK, TABLE, BENCH & BACK RAIL WITH HAT & FOOT BOARDS.

The part ABC being movable may be used for Desk as shown at A, for Back Rail as at B, or for Table as at C C, as occasion may require. (*Provision can also be made for bookboard to order.*)

N^o 5 BENCH & BOOK BOARDN^o 19 BENCH & TABLE

MACFARLANE'S EXAMPLES Showing the Standards in connection with the woodwork

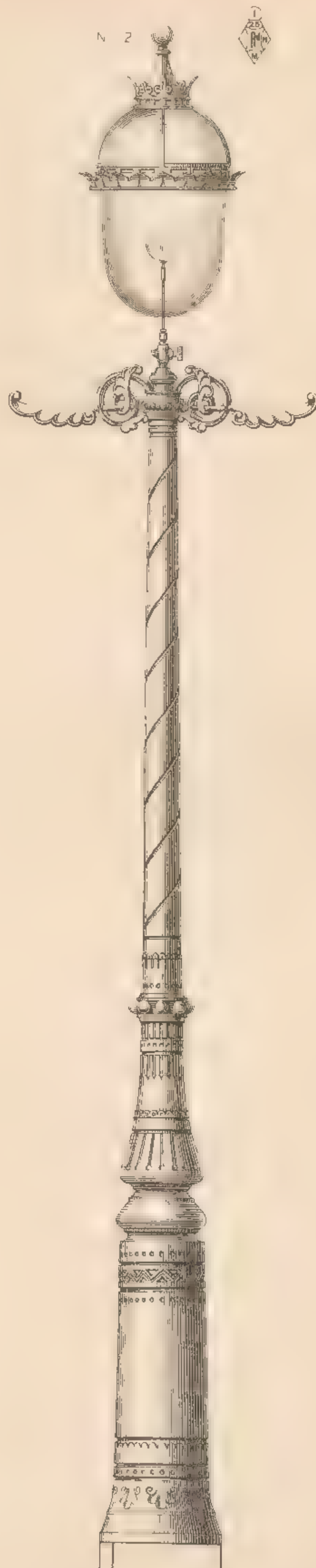
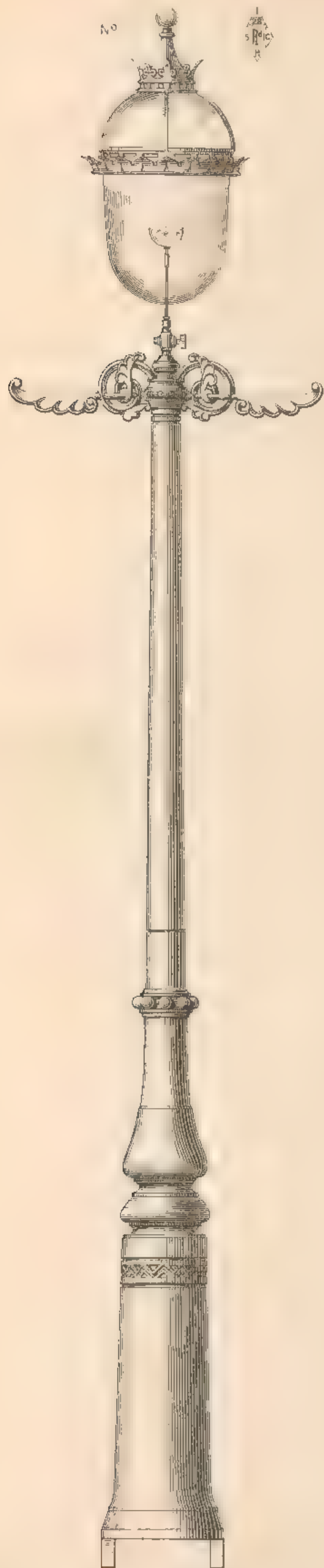
SCALE INCH — FOOT

SECTION X. LAMPS.

MACFARLANE'S LAMP PILLARS, STANDARDS AND BRACKETS

Any other suitable design of lantern may be substituted for those illustrated.

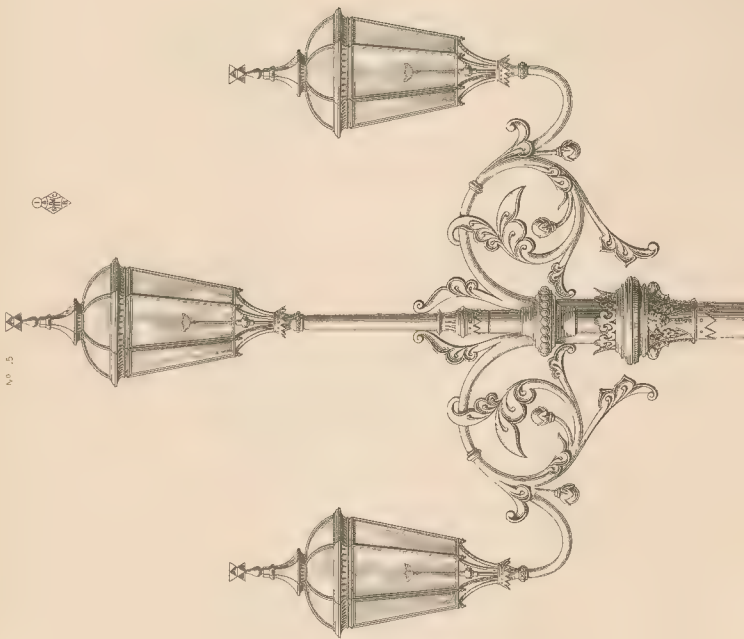
539



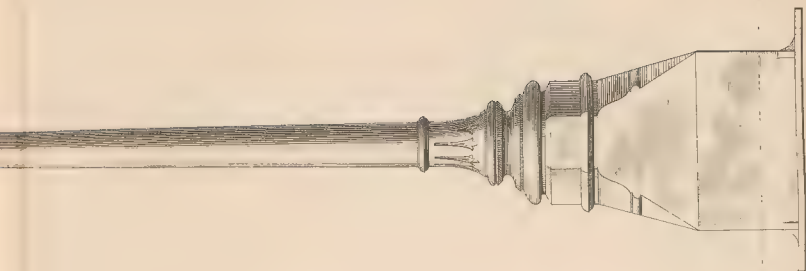
SCALE 1 INCH = 1 FOOT

MACFARLANE'S LAMP PILLARS, STANDARDS AND BRACKETS

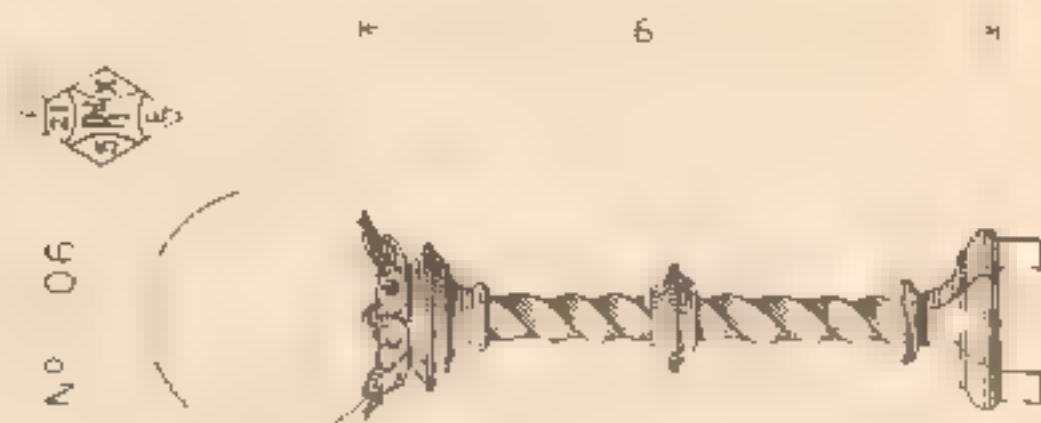
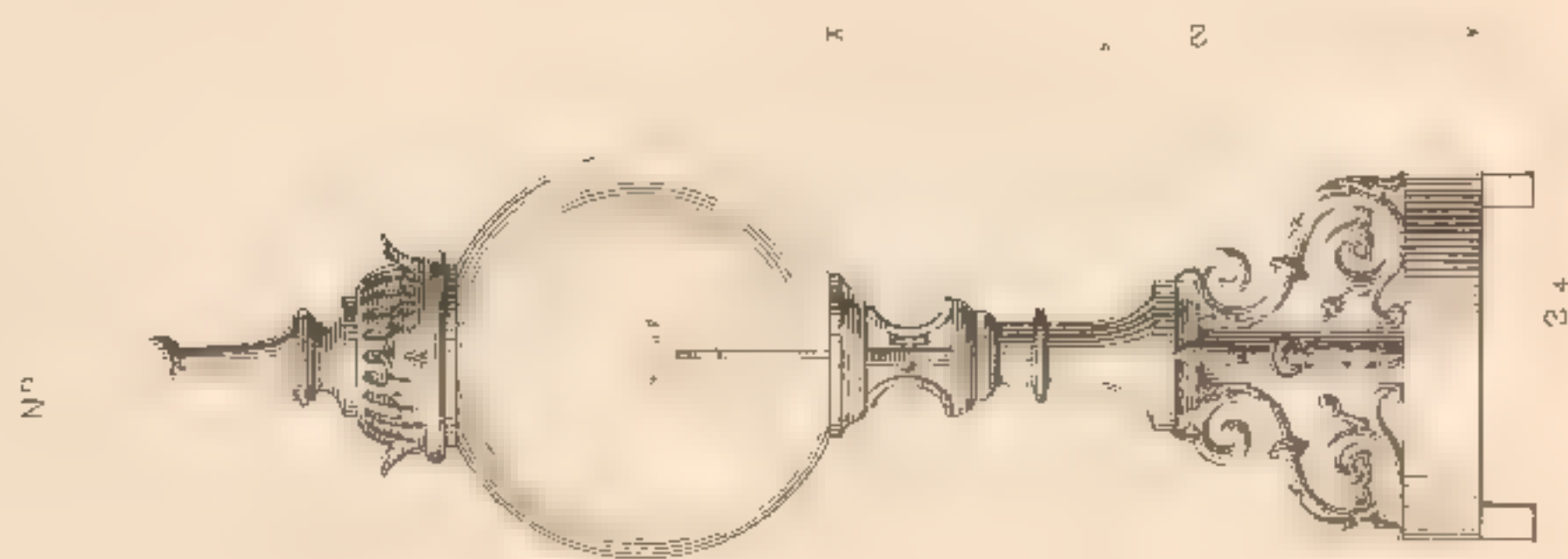
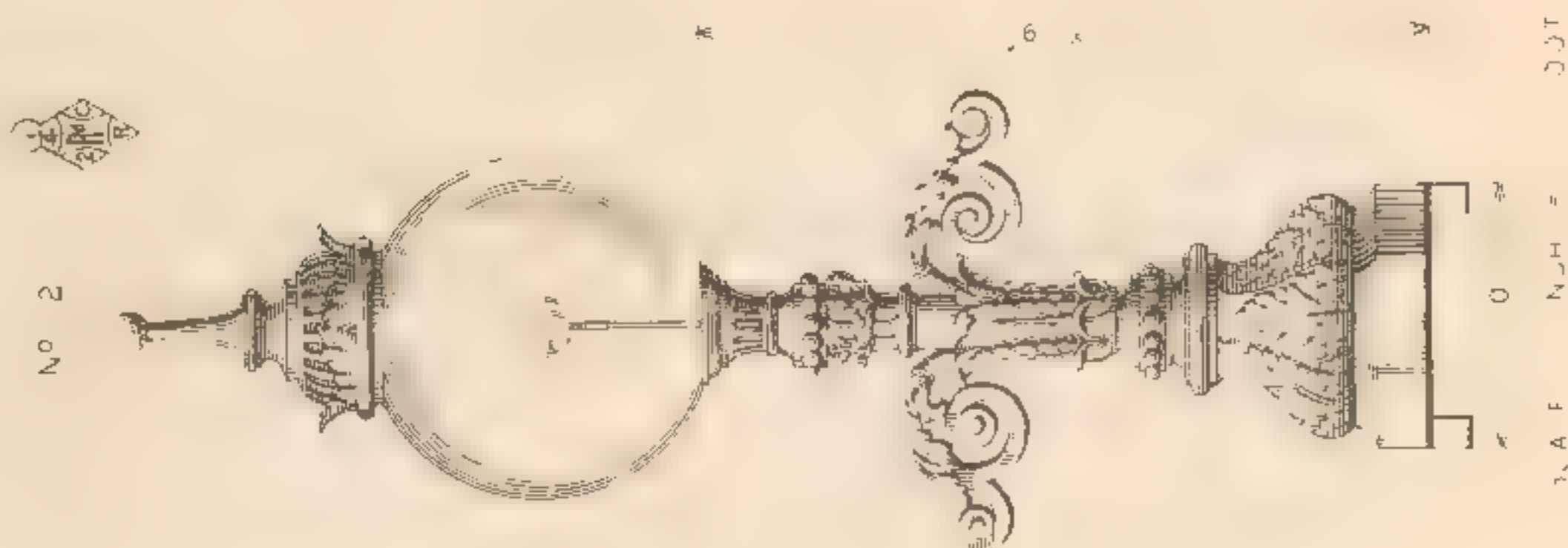
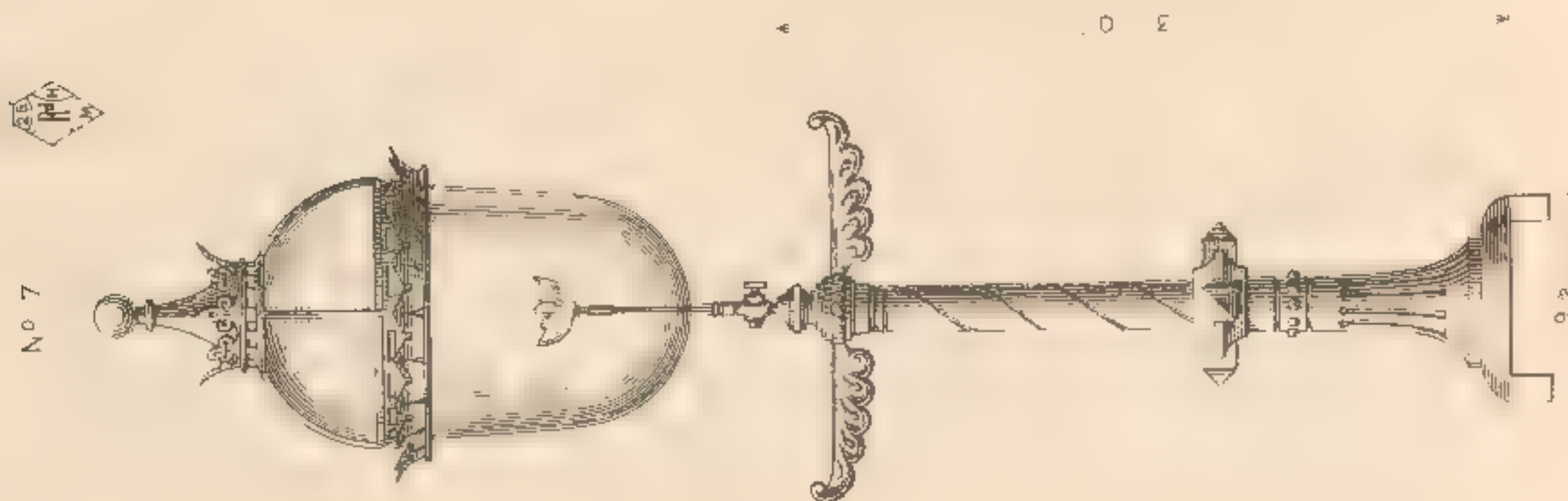
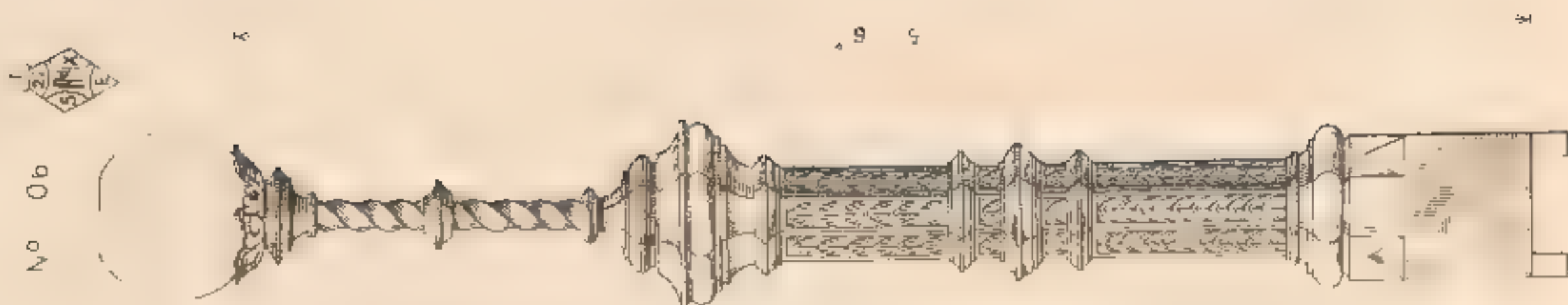
No. 5



SCALE 1 INCH = FOOT



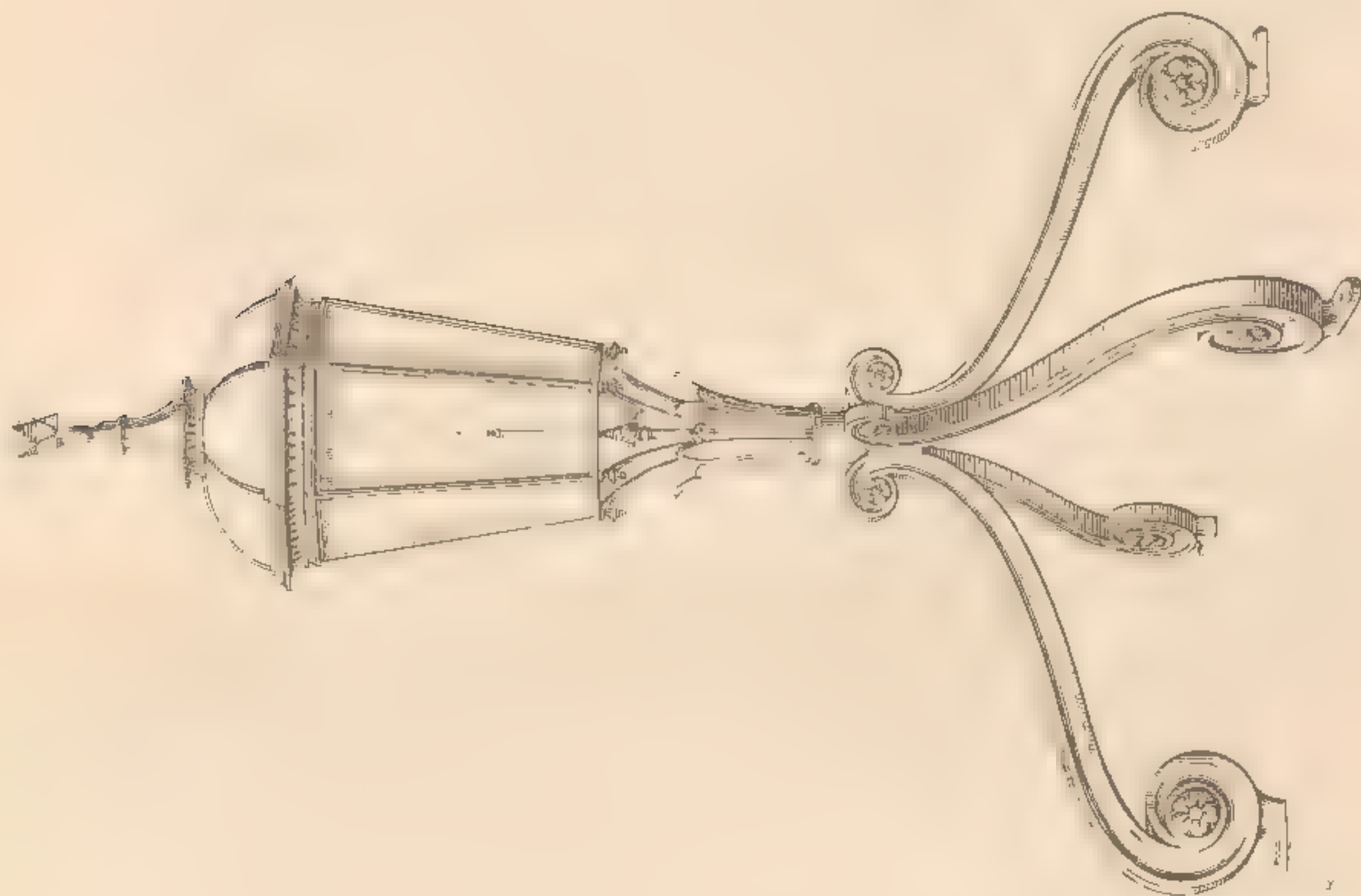
MACFARLANE'S LAMP PILLARS, STANDARDS AND BRACKETS



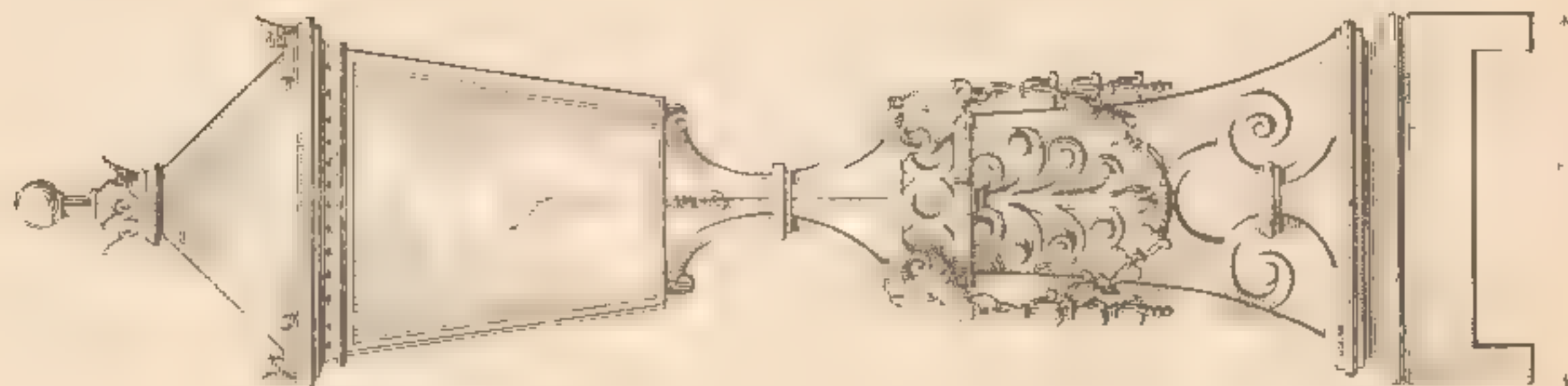
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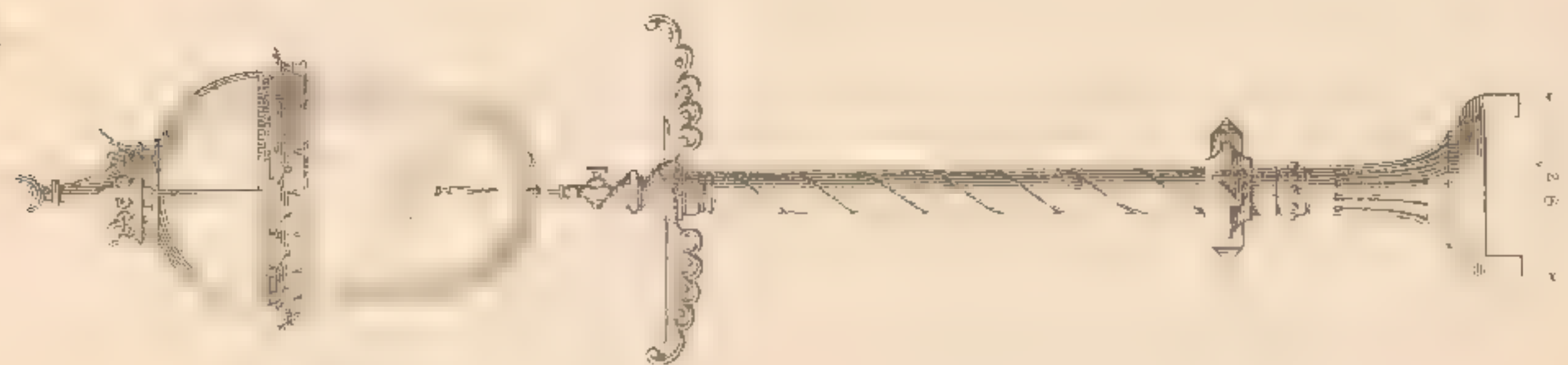
No 3



No 8

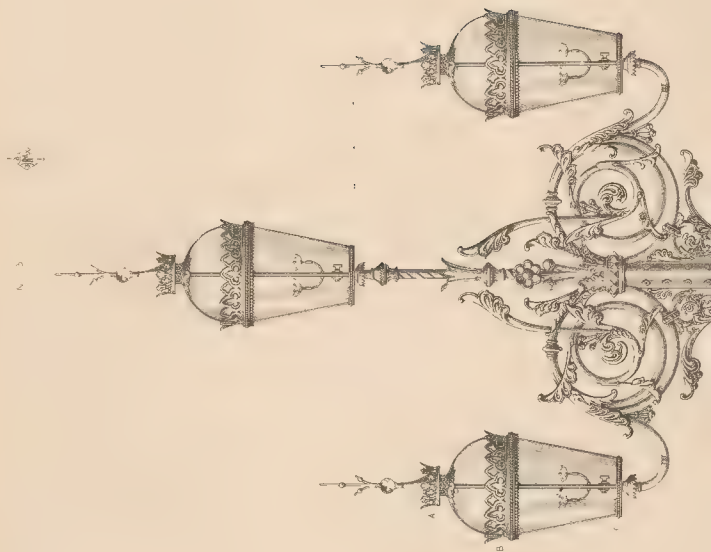


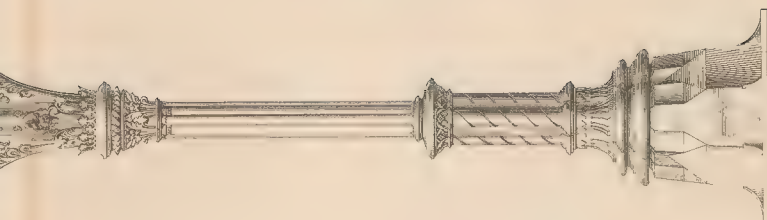
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SCALE 1 INCH = 1 FOOT

MACFARLANE'S LAMP PILLARS, STANDARDS AND BRACKETS

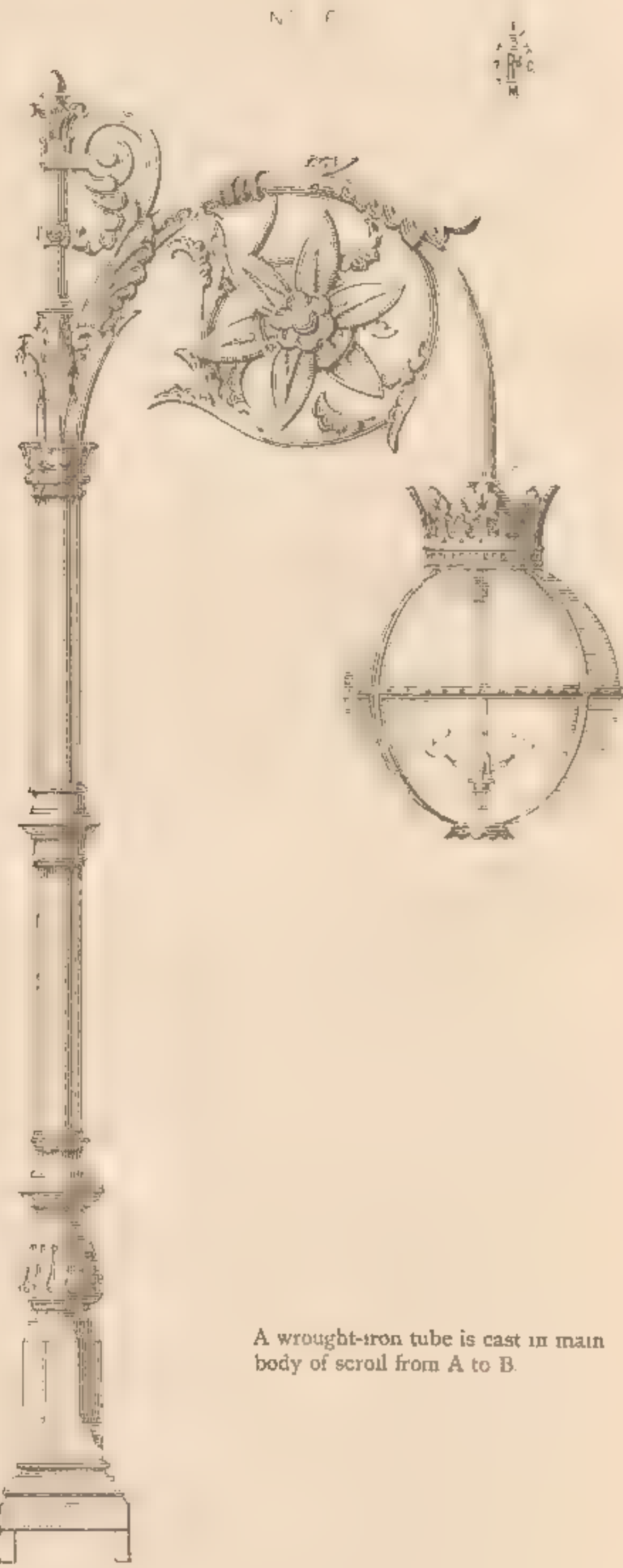
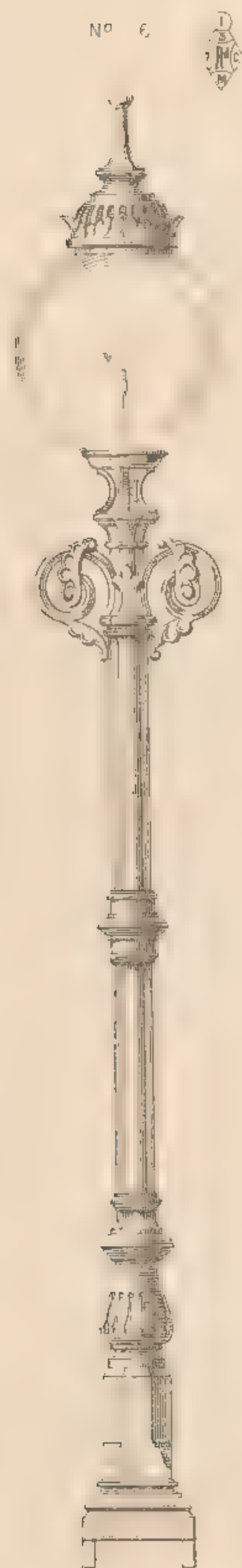




SCALE $\frac{3}{4}$ INCH = 1 FOOT

The ornamental capitals and ring A, B, and C on balustrades are cast iron.

MACFARLANE'S LAMP PILLARS, STANDARDS AND BRACKETS



A wrought-iron tube is cast in main
body of scroll from A to B.

MACFARLANE'S LAMP PILLARS STANDARDS AND BRACKETS

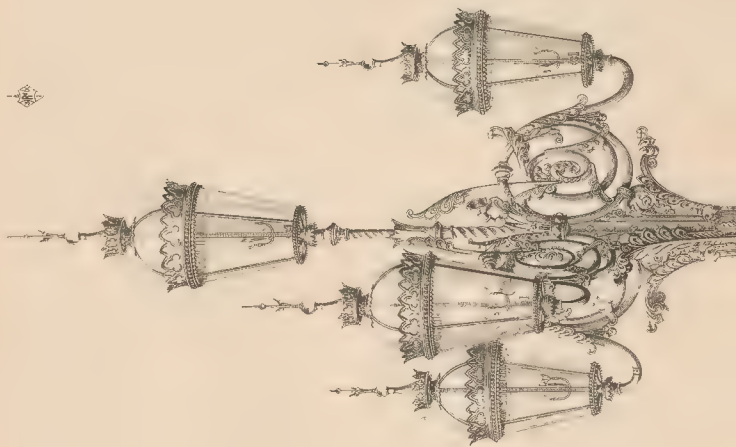


A wrought-iron tube A, is cast in the main body of scroll.

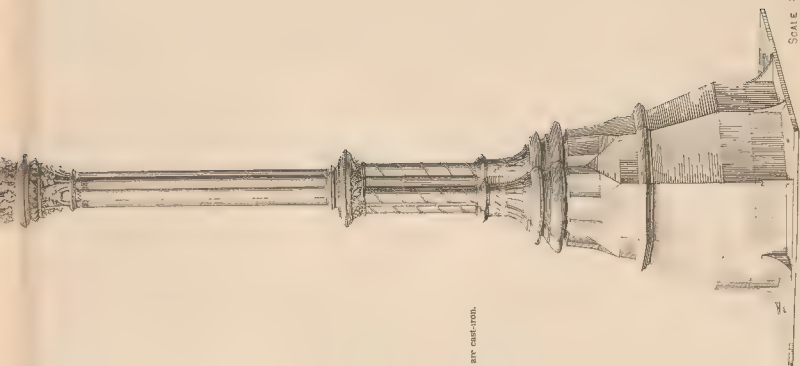
SCALE INCH = 1

MACFARLANE'S LAMP, PILLARS, STANDARDS AND BRACKETS

No. 4



"O", 6.

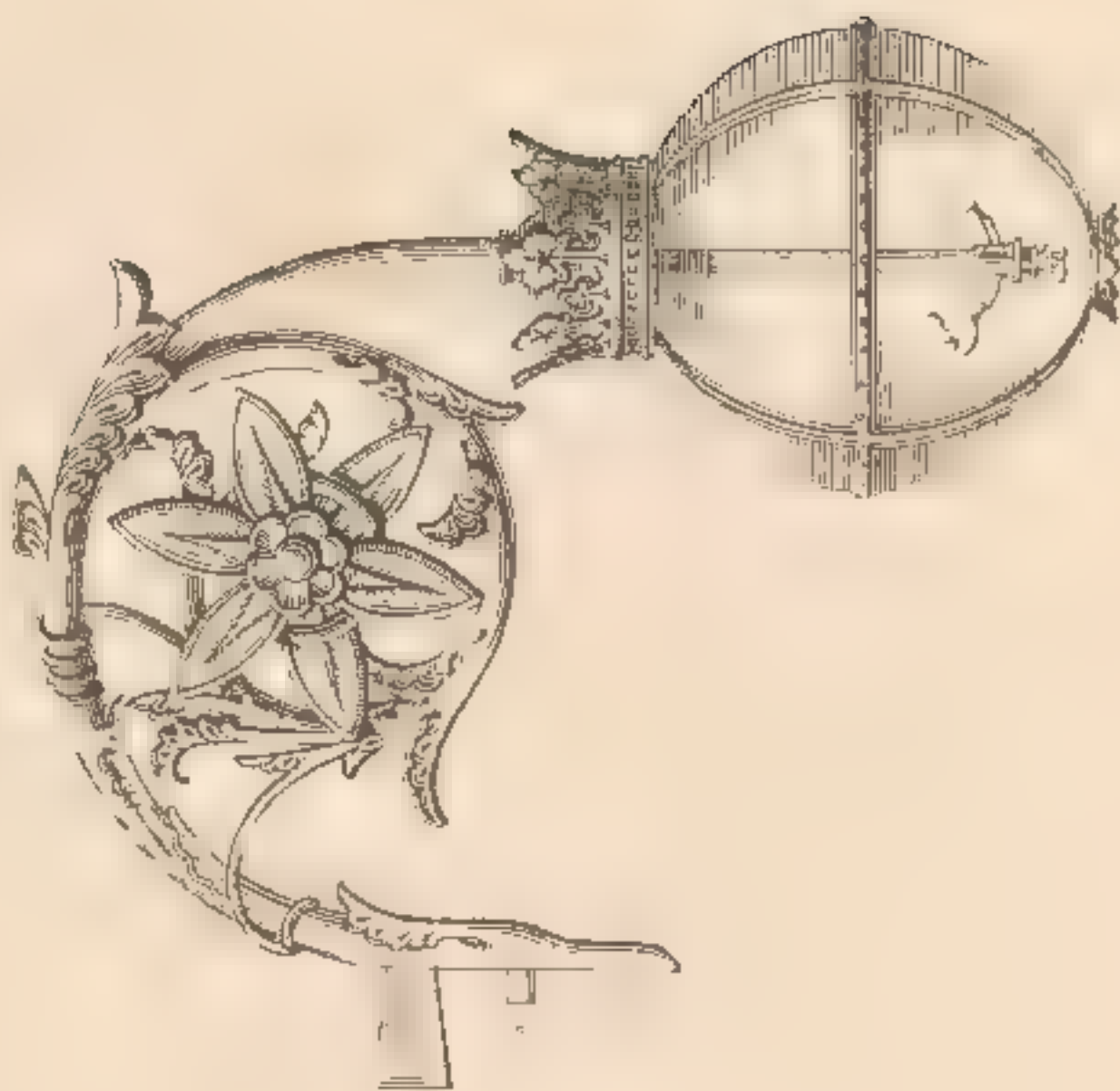
SCALE $\frac{3}{4}$ INCH = 1 FOOT

The ornamental coronals and ring A, B, and C on lanterns are cast-iron.

MACFARLANE'S LAMP PIPES, STANDARDS AND BRACKETS

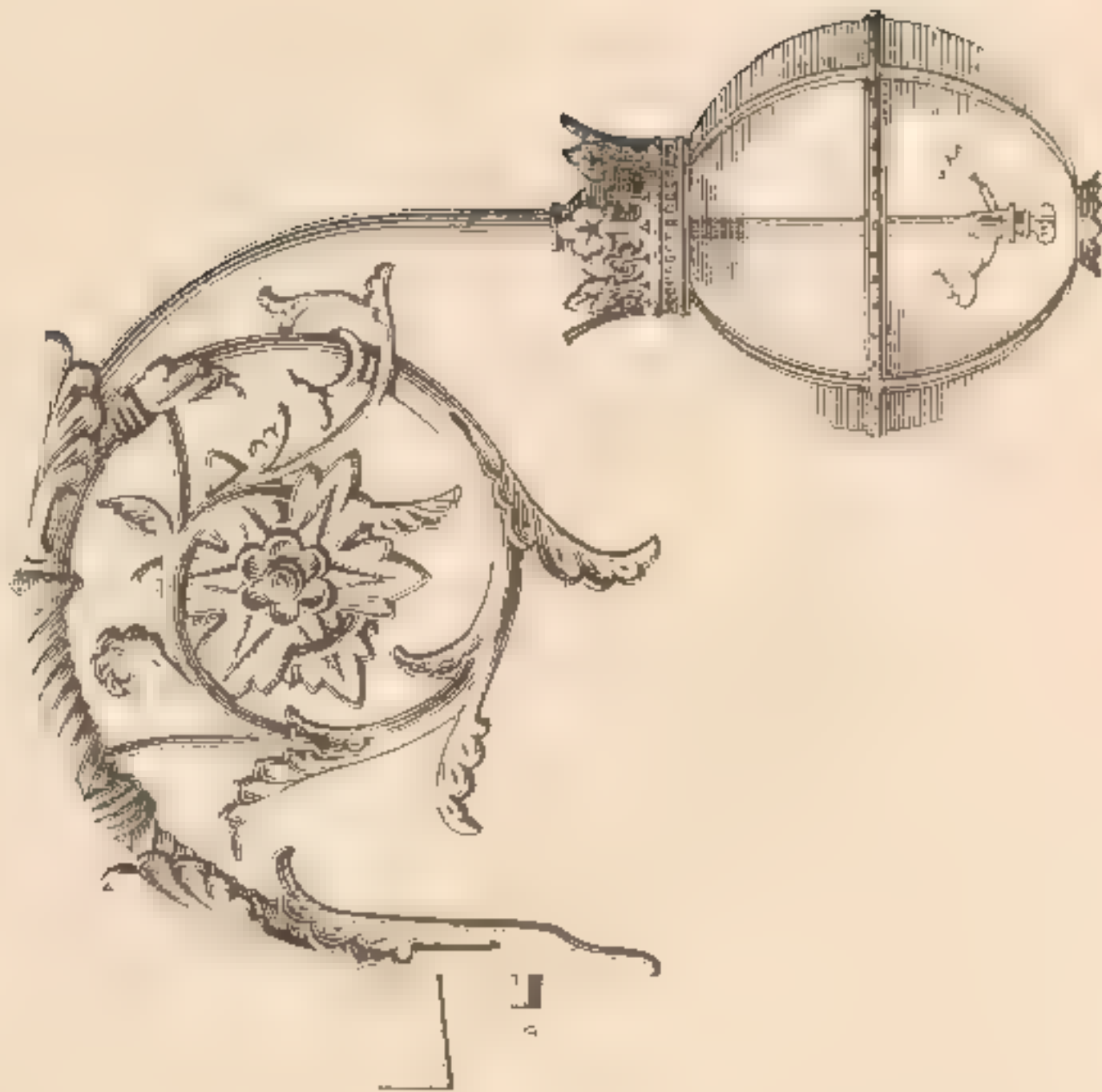
No 4

2 7



No 4

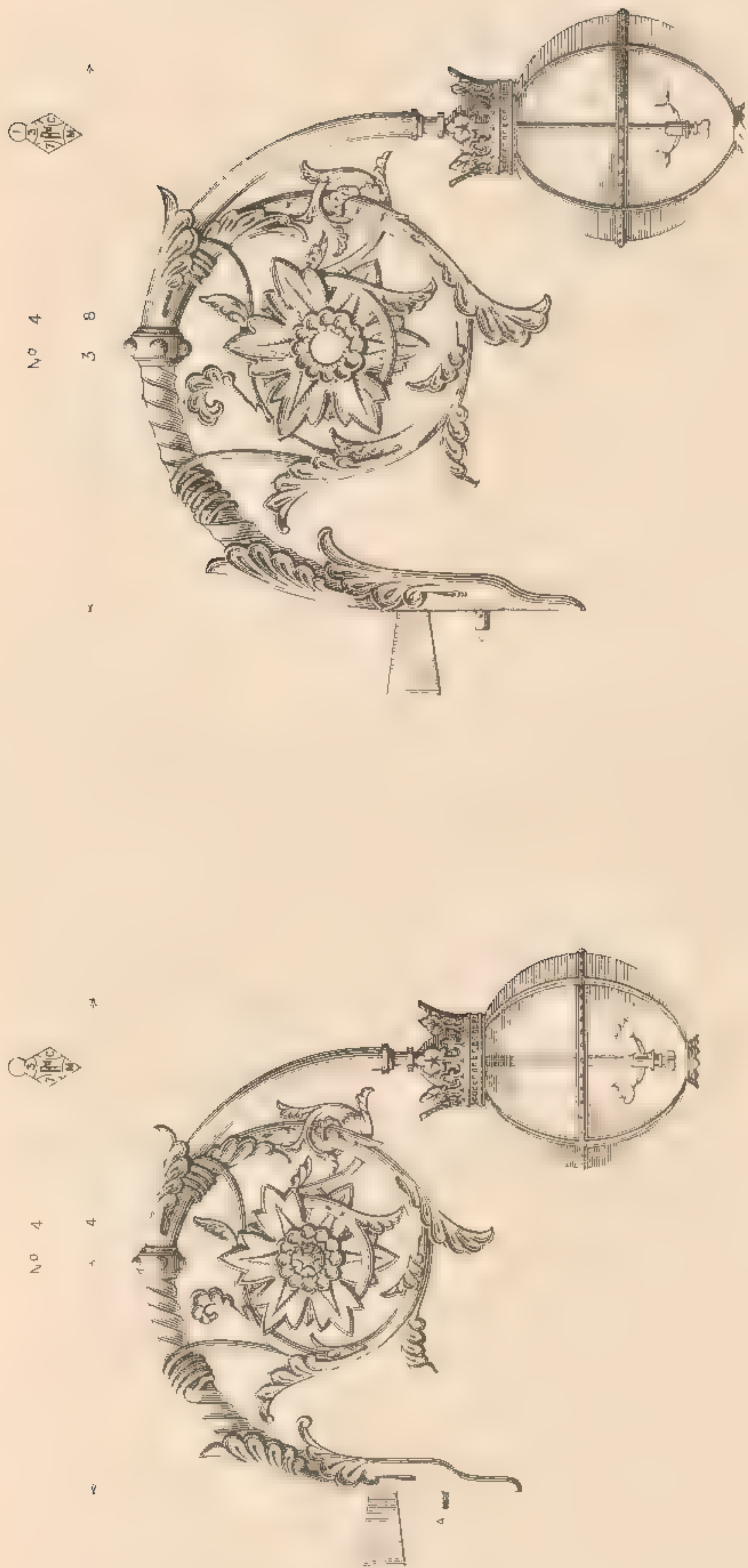
3 0



A wrought iron tube A, cast in the main body of scroll.

SCALE 1 INCH = 1 FOOT

MACFARLANE'S LAMP PILLARS STANDARDS AND BRACKETS

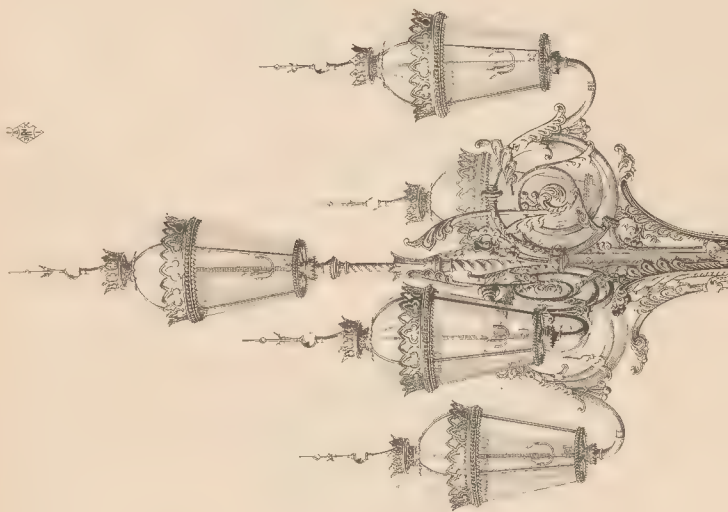


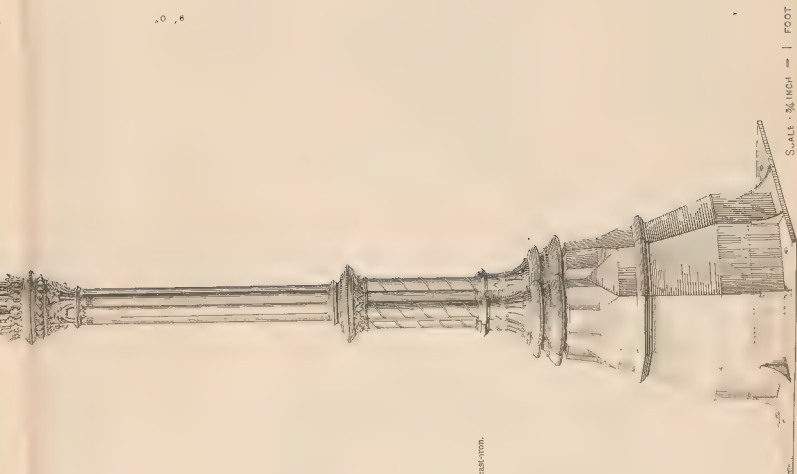
A wrought-iron tube A is cast in the main body of scroll

SCALE 1 INCH = 1 FOOT

MACFARLANE'S LAMP, PILLARS, STANDARDS AND BRACKETS

Fig. 5



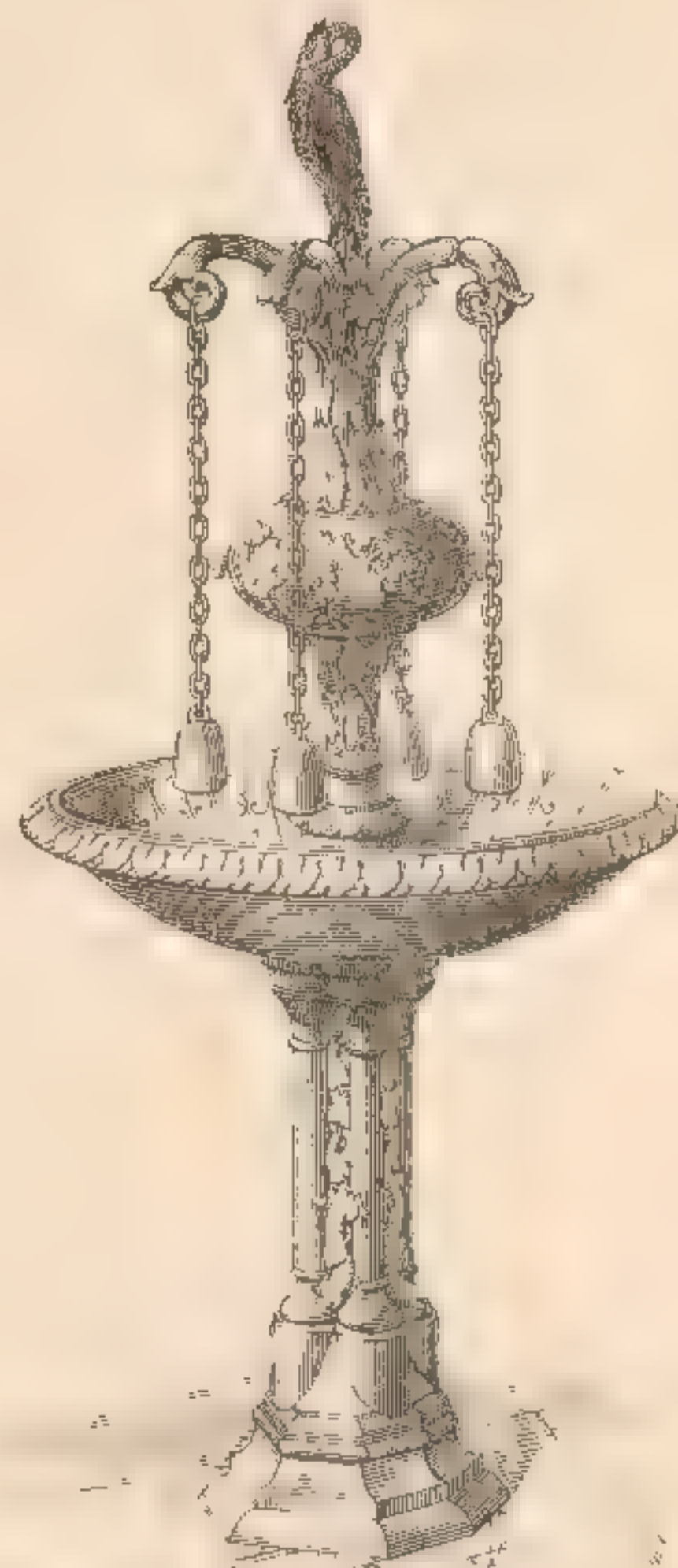
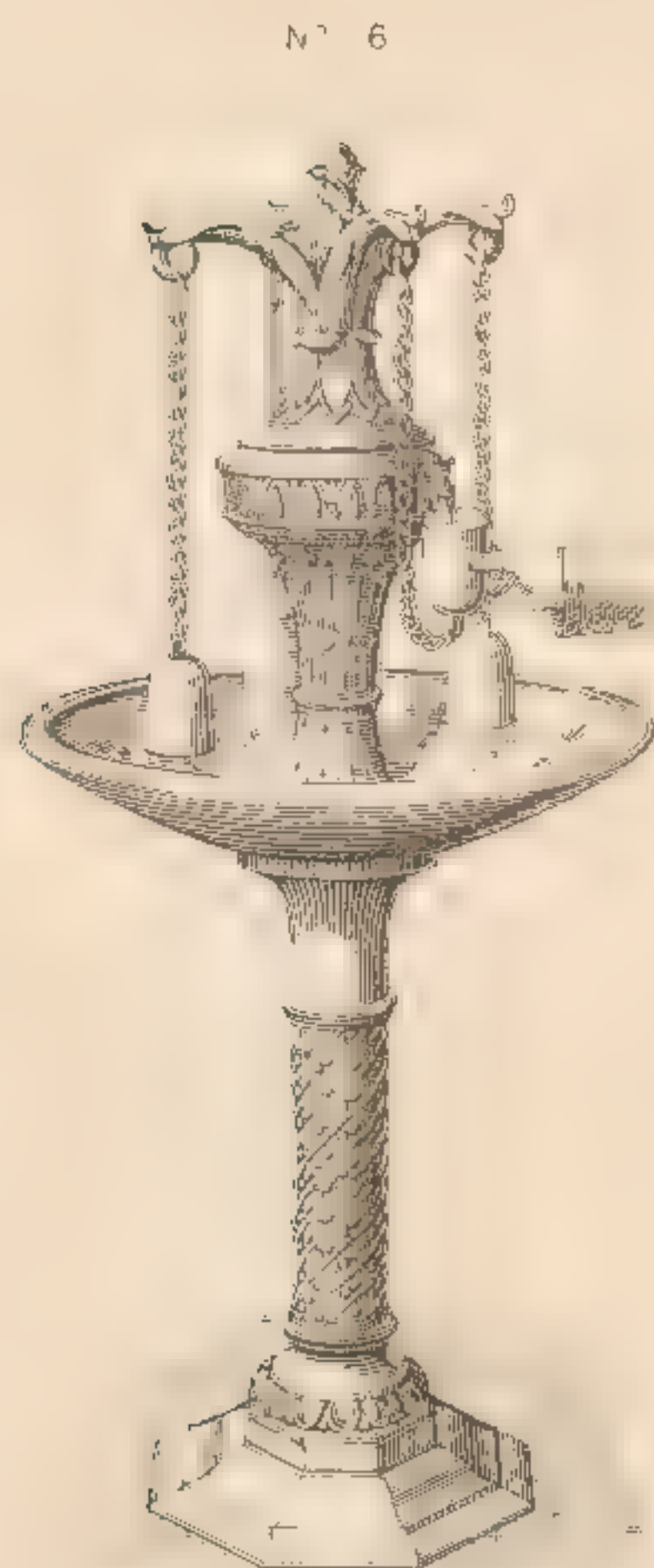
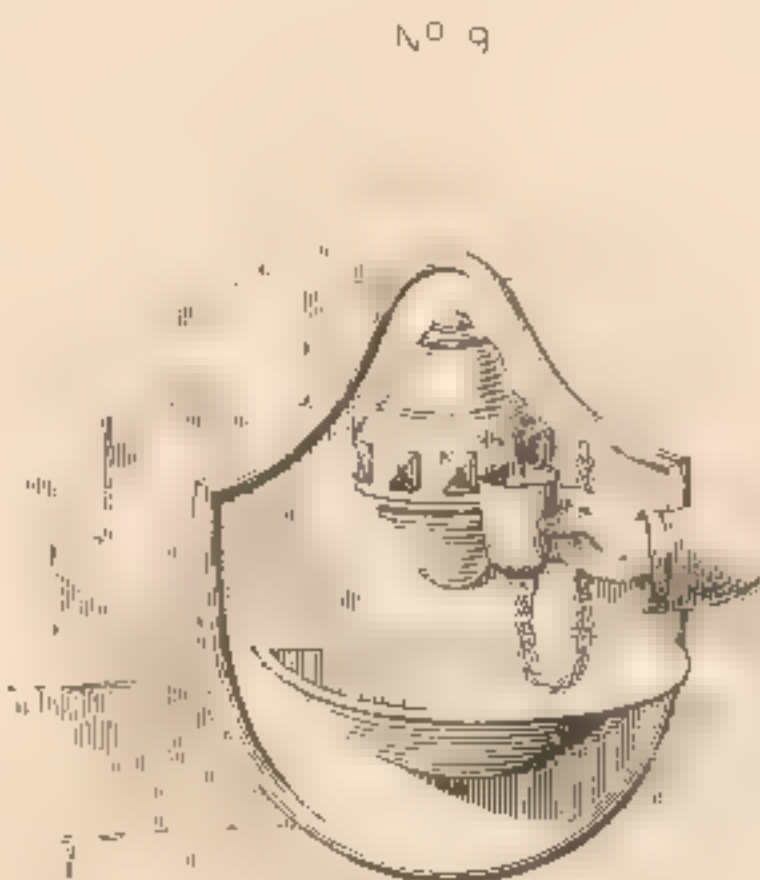
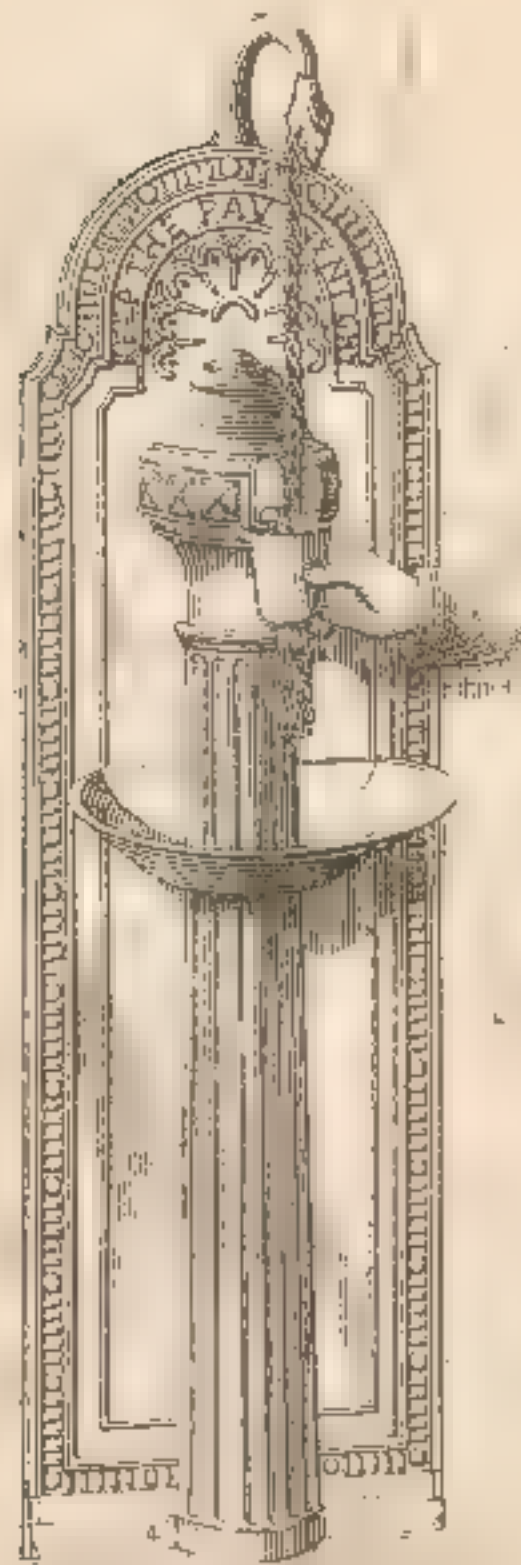


The ornamental capitals and ring A, B, and C on lanterns are cast-iron.

SECTION XI. DRINKING FOUNTAINS.

MACFARLANE'S PATENT DRINKING FOUNTAINS

We call particular attention to the simple action of the water supply valve; by pressing the lip of the drinking-cup against the valve-stud, as shown in the illustration, the water flows into it, and thus the operation of opening the valve and drinking is performed by one hand only.



MACFARLANE'S DRINKING FOUNTAINS

N° 8



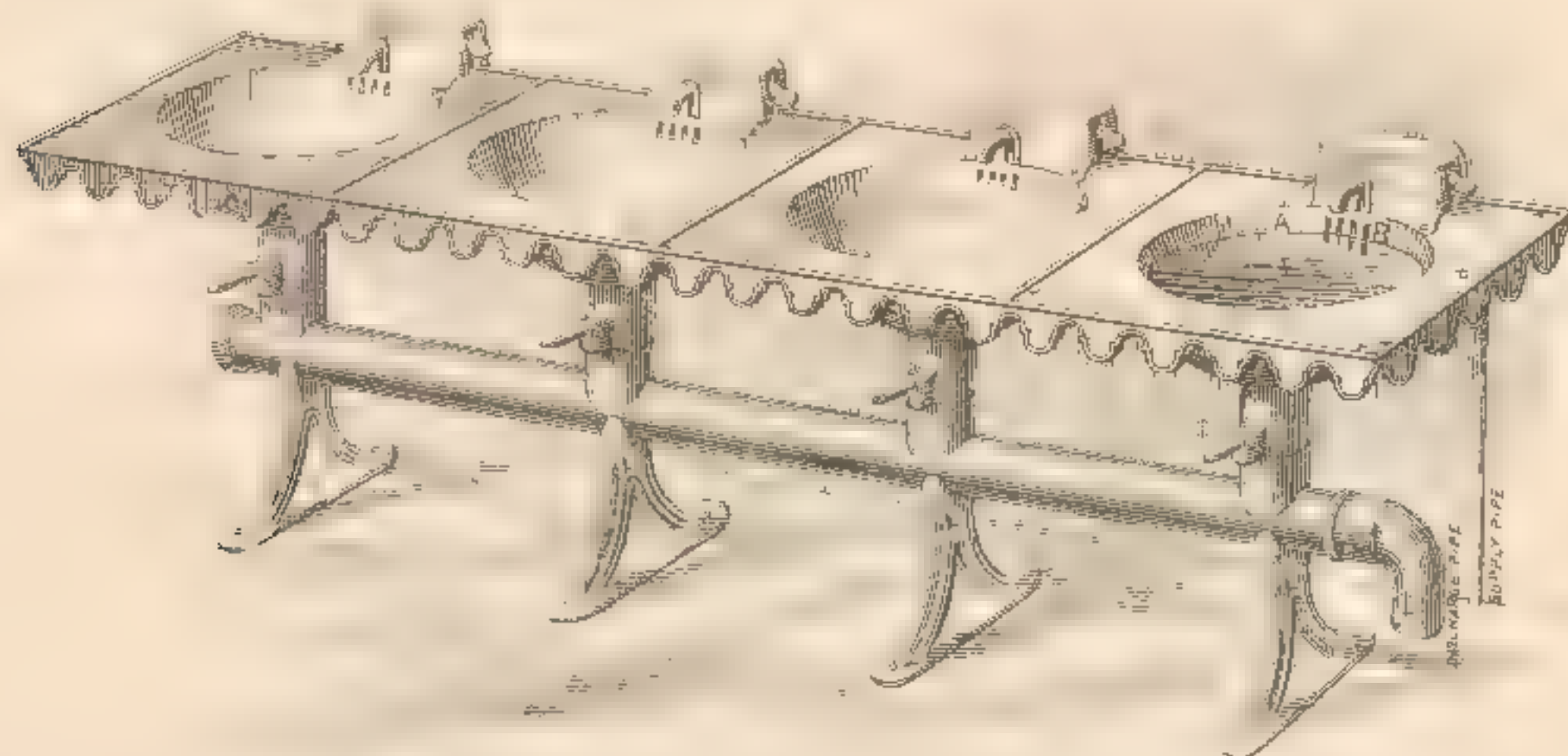
SCALE INCH = 1 FOOT

SECTION XII. ABLUTIONARY APPLIANCES.

MACFARLANE'S PATENT ABLUTIONARY APPLIANCES.

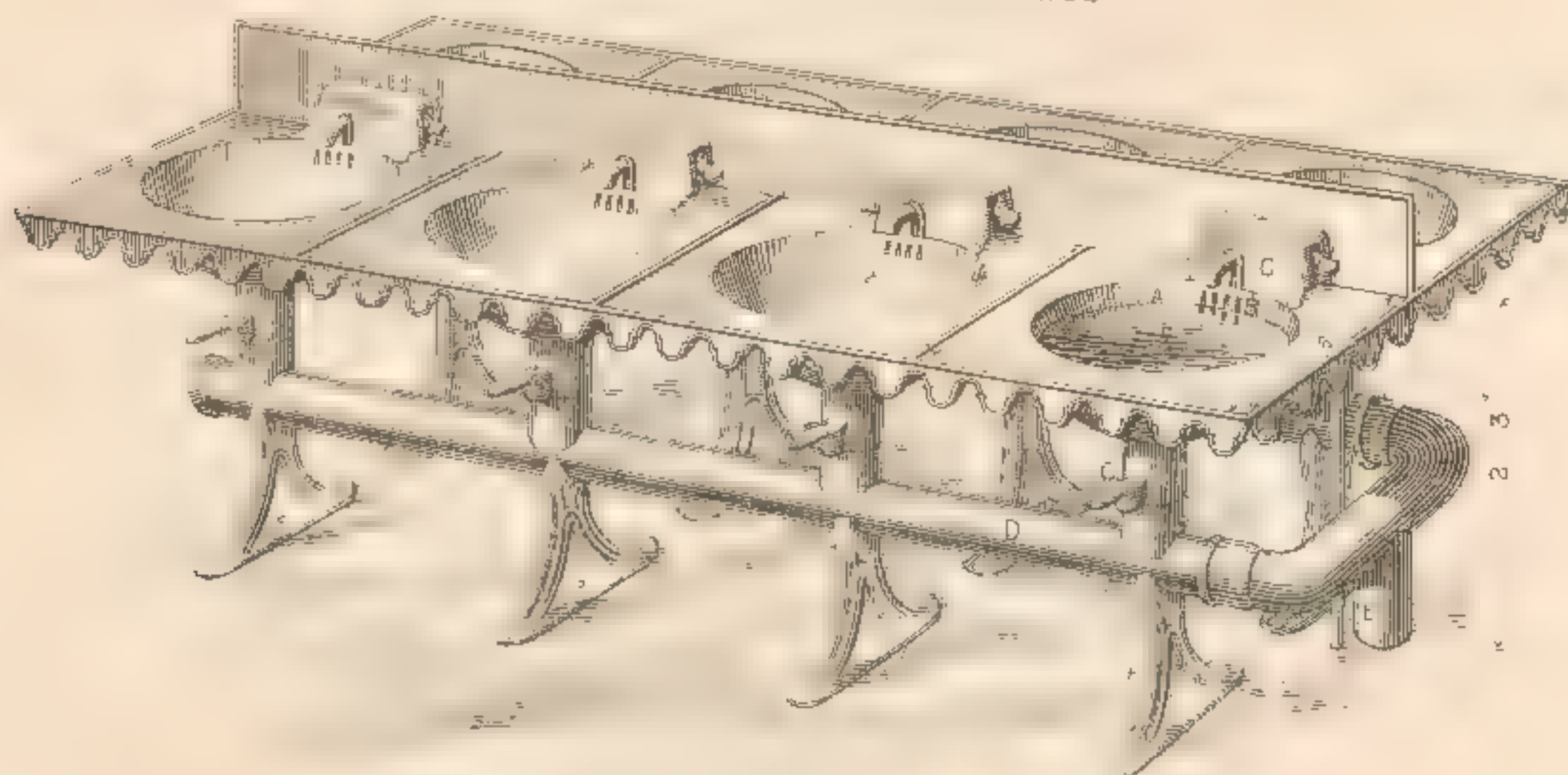
EMBRACING WASH HAND AND WASH FOOT BASINS BATHS AND WATER TROUGHS

No 1 W H BASIN RANGE



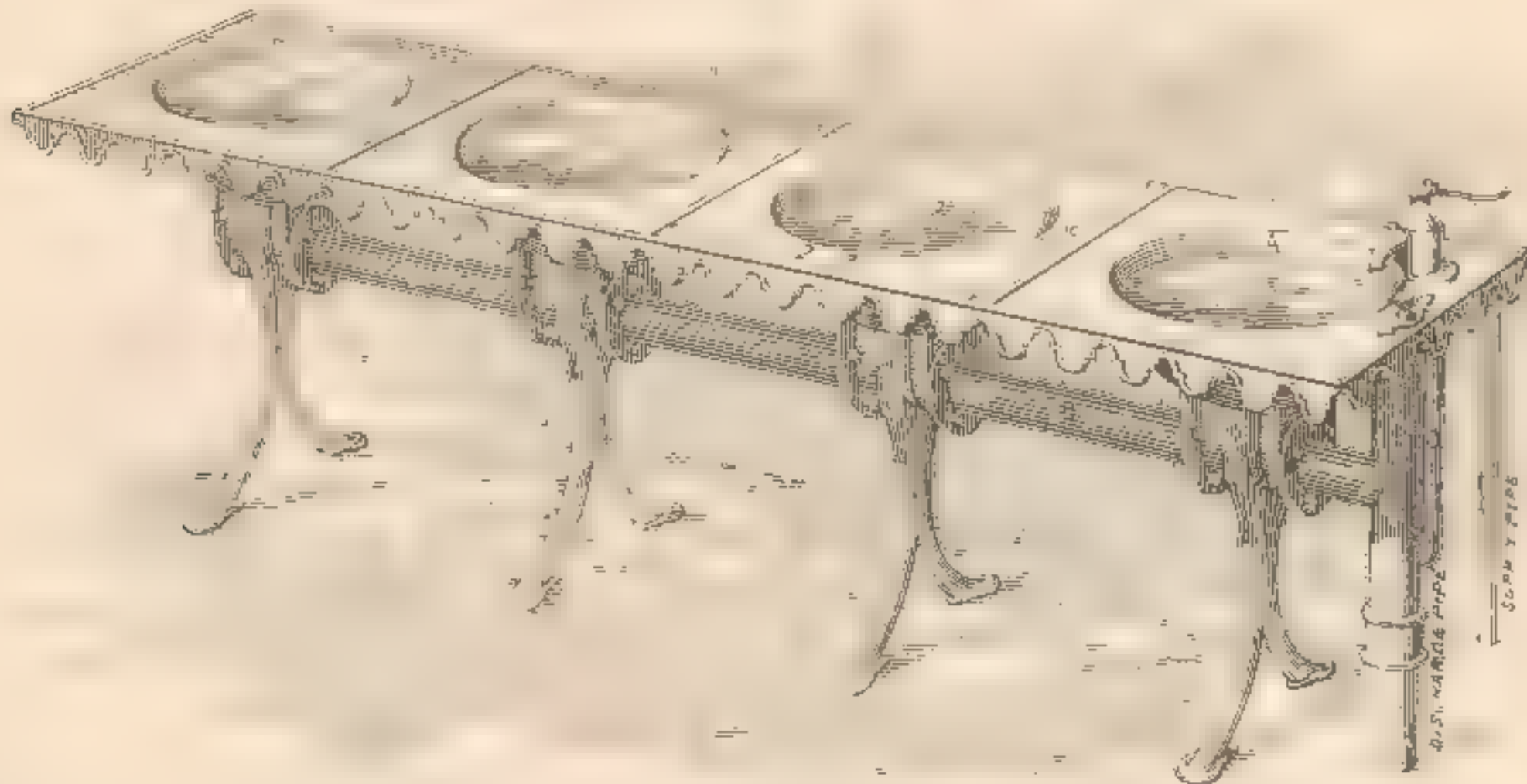
No. 1 W. H. Basin Range consists of basins A, each having an overflow waste pipe B leading to the discharge pipe; in the bottom of each basin is a movable stopper, which being acted on by the lever C, allows the water to pass through the discharge pipe D and drop pipe E, to the sewer; the water supply pipe runs along the back, and a self-closing bib cock is under each cover G, the whole being supported by standards F, and fastened to wall and floor.

No 2 DOUBLE W H BASIN RANGE



No. 2 Double W. H. Basin Range is in its leading features the same as No. 1, but for many purposes it has considerable advantages, as from its construction it is suited to stand out isolated on the floor.

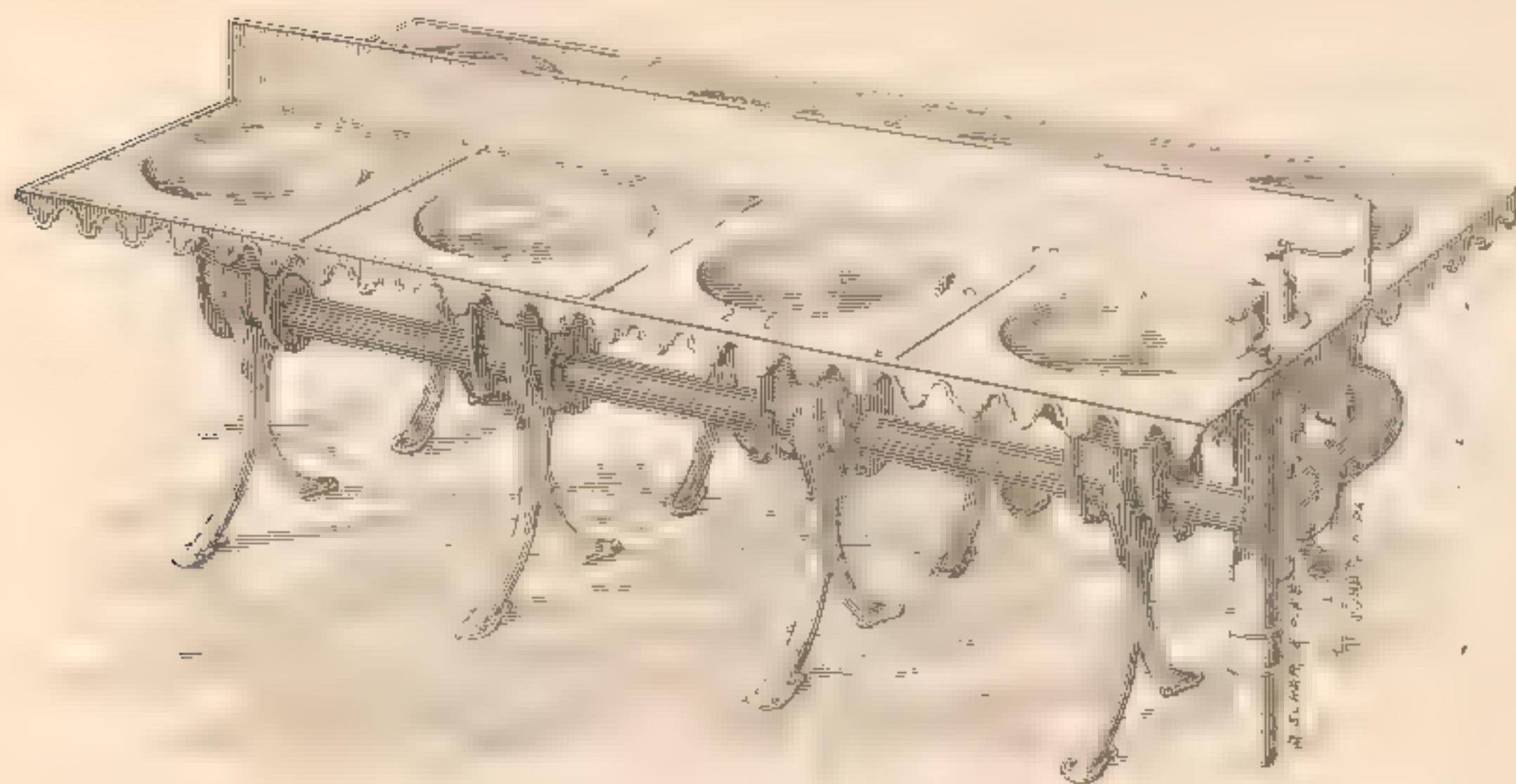
No 3 W H BASIN RANGE



No. 3 W. H. Basin Range consists of basins A, with discharge opening in bottom, connected together by means of the horizontal pipe B; attached to this is an overflow waste pipe D and discharge pipe E, the handle of which rests on the top plate; the basins are filled simultaneously by means of a $\frac{1}{4}$ inch tap, and the whole is supported by standards, and fastened to the wall and floor.

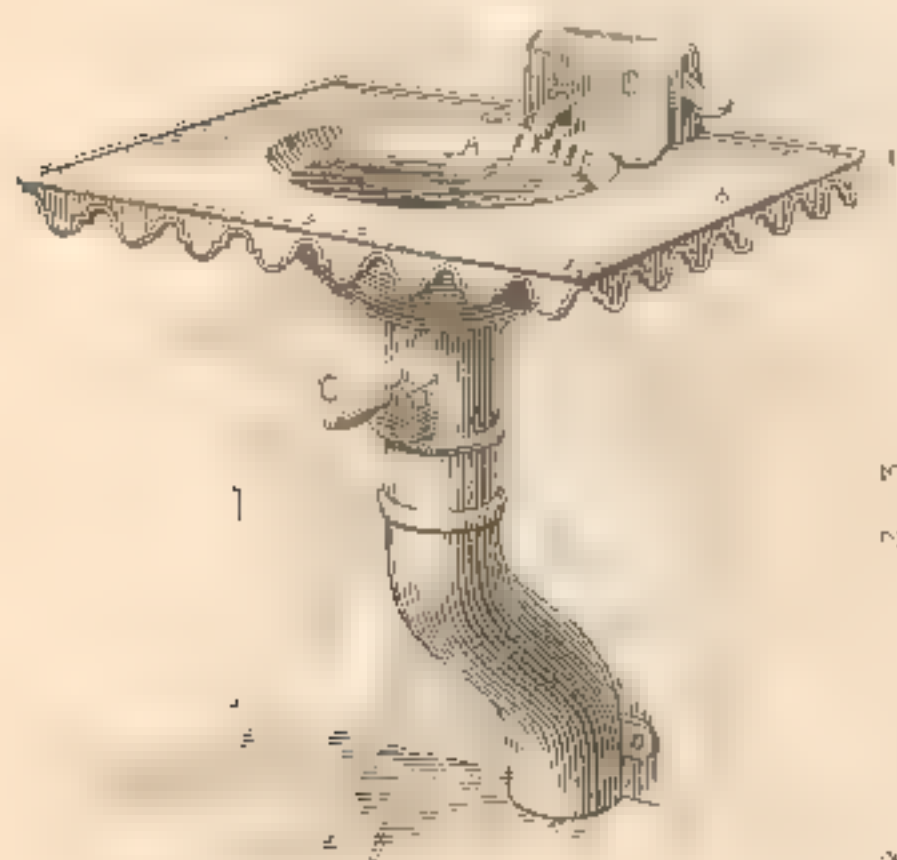
No. 3 is specially adapted for establishments where a stated time is set apart for ablutionary purposes, its cheapness, simplicity of construction, the little water it requires, and its substantiality (being wholly composed of cast-iron), rendering it particularly suitable for public use.

No 4 DOUBLE W H BASIN RANGE

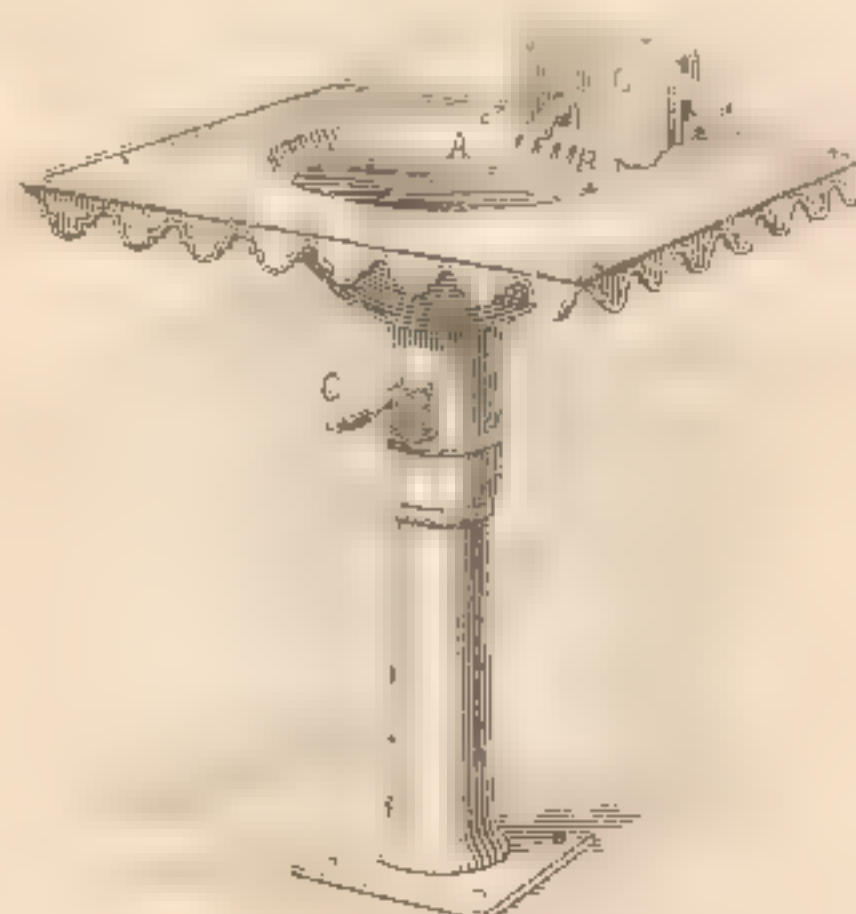


No. 4 Double W. H. Basin Range is in its leading features the same as No. 3, but for many purposes it has considerable advantages, as from its construction it is suited to stand out isolated on the floor; like No. 3 it is specially adapted for establishments where a stated time is set apart for ablutionary purposes, its cheapness, simplicity of construction, the little water it requires, and its substantiality (being wholly composed of cast-iron), rendering it particularly suitable for public use.

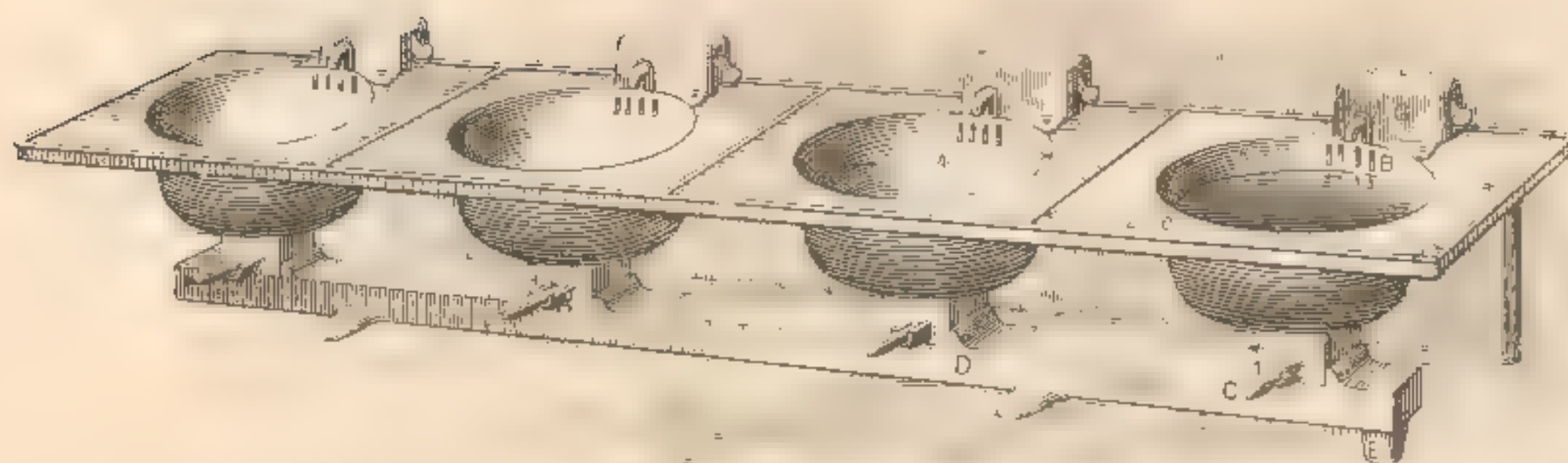
No 5 W H BASIN STAND



No 6 W H BASIN STAND



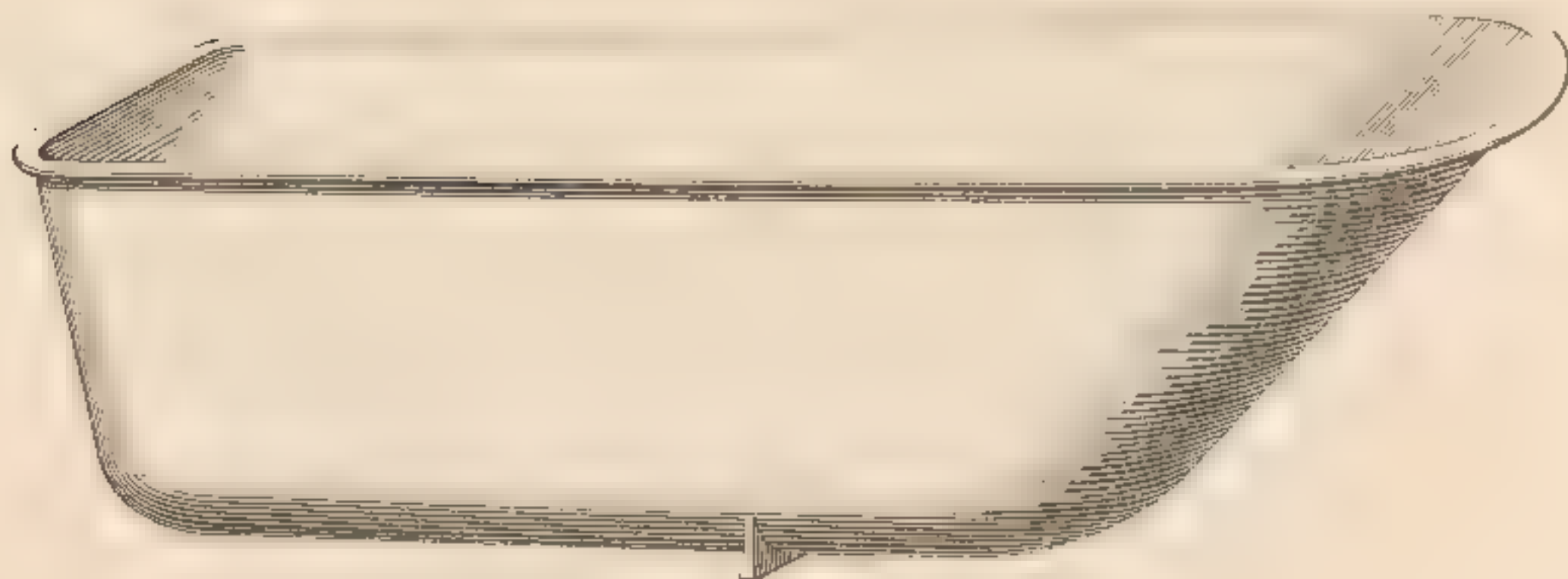
No 1 WASH FOOT BASIN RANGE



No. 1 Wash Foot Basin Range consists of basins A, each having an overflow waste pipe B leading to the discharge pipe; in the bottom of each basin is a movable stopper, which being acted on by the lever C, allows the water to pass through the discharge pipe D and drop pipe E to the sewer; the water supply pipe runs along the back, and a self-closing bib cock is under each cover G, the whole being fastened to the floor and wall by screws.

MACFARLANE'S PATENT ABLUTIONARY APPLIANCES

FIG. 4



5	ft	3	ins	2	ft	2	ins	1	ft	8	ins
5	ft	3	ins	2	ft	2	ins	1	ft	8	ins

NO 5 BATH (PARALLEL SIDES)



LENGTH	BREADTH	DEPTH
5 FT 3 INS	X 2 FT 2 INS	X 1 FT 1 INS
5 - 8	X 2	X 1

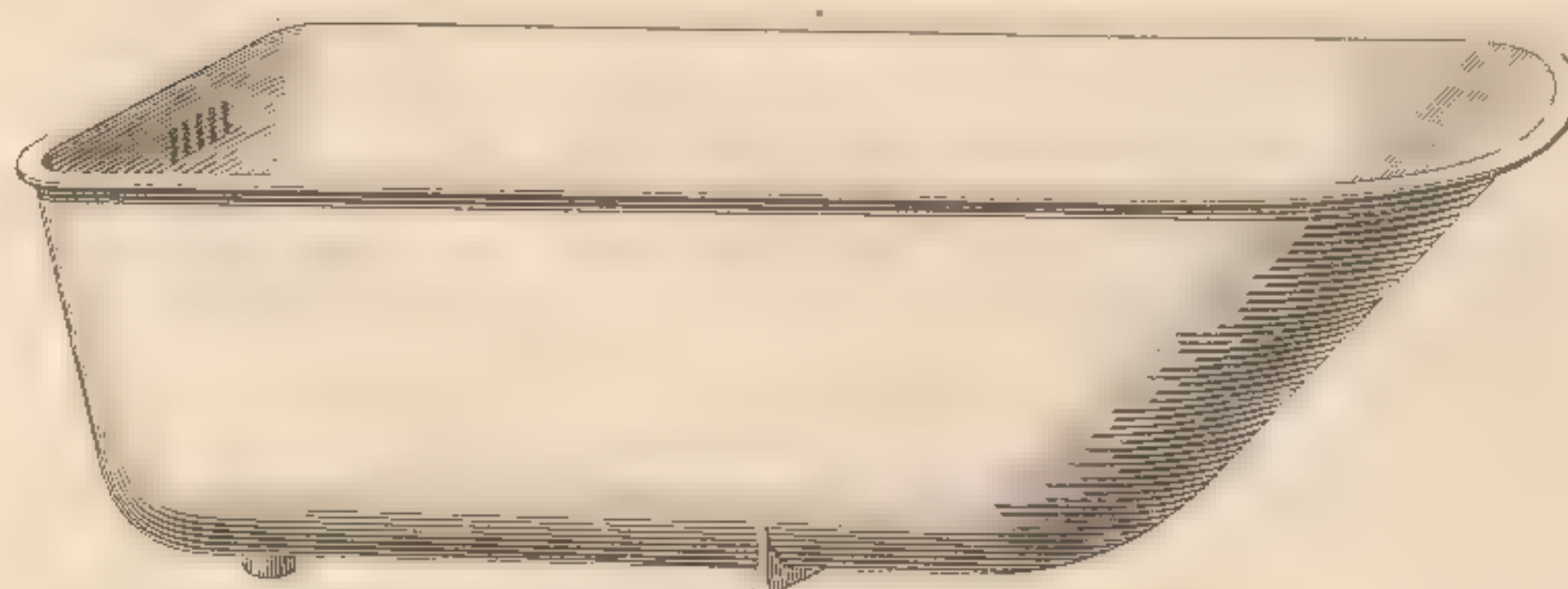
NO 6 BATH WITH OVERFLOW & DISCHARGE PLUG



LENGTH	BREADTH	DEPTH
5 FT 3 INS	X 2 FT 2 INS	X 1 FT 8 INS
5 - 8	X 2	X 1
5 - 0	X 2	X 2

MACFARLANE'S PATENT ABLUTIONARY APPLIANCES

NO 7 BATH
PARALLEL SIDES, WITH OVERFLOW & DISCHARGE PLUG



LENGTH	BREADTH	DEPTH
5 FT 3 IN	2 FT 2 IN	1 FT 1 IN
5 8	2 2	1 1

NO 3 BATH



LENGTH	BREADTH	DEPTH
5 FT 6 IN	2 FT 2 IN	1 FT 10 IN
5 6	2 2	1 10

No 3 Bath is the same in form as No. 1, but with water supply and discharge apparatus complete, and ready for joining to supply pipes and drains. The whole of the working apparatus is in a separate compartment at the foot of the Bath, inclosed by a division plate B, and cover C, and consists of a discharge valve D, in the bottom, wrought by a handle, and an upright overflow waste pipe F; these are connected with, and discharge through, a syphon trap G. The water supply apparatus consists of a $\frac{1}{4}$ inch brass tap.

NO 2 BATH



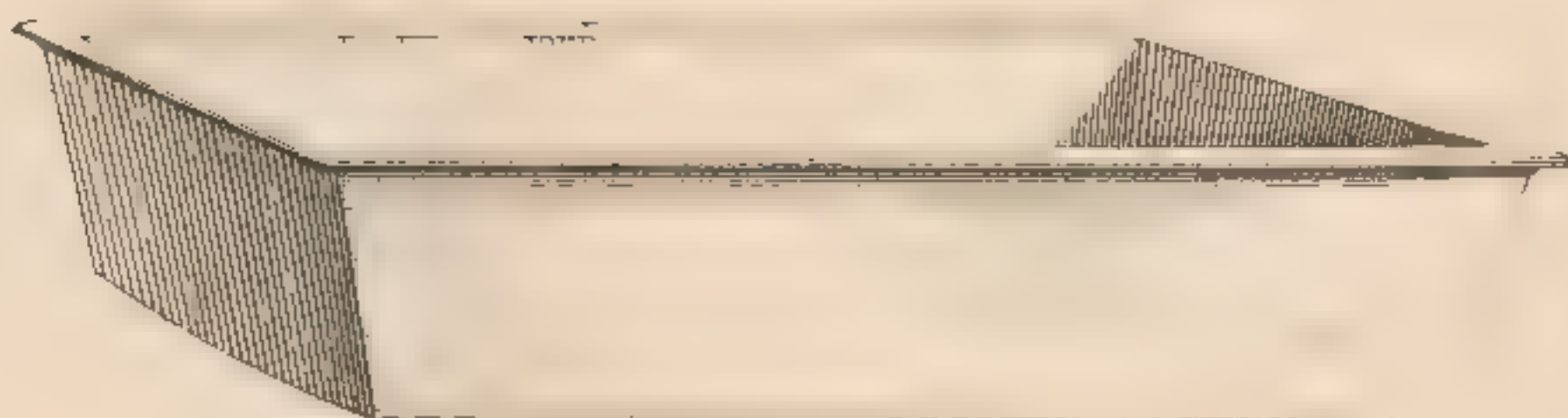
LENGTH	BREADTH	DEPTH
5 FT 6 IN	2 FT 2 IN	1 FT 10 IN
5 6	2 2	1 10

No. 2 Bath is the same as No. 3, but with the addition of a self-acting float ball and tap, attached to the supply tap, to prevent the waste of water.

In order to fill the Bath, the supply tap J is opened, and the water then passes through this and the float ball tap into the Bath, then when the Bath is filled to the proper height, the water acting on the float ball H, shuts the float ball tap, thus completely preventing that excessive waste of water so generally complained of.

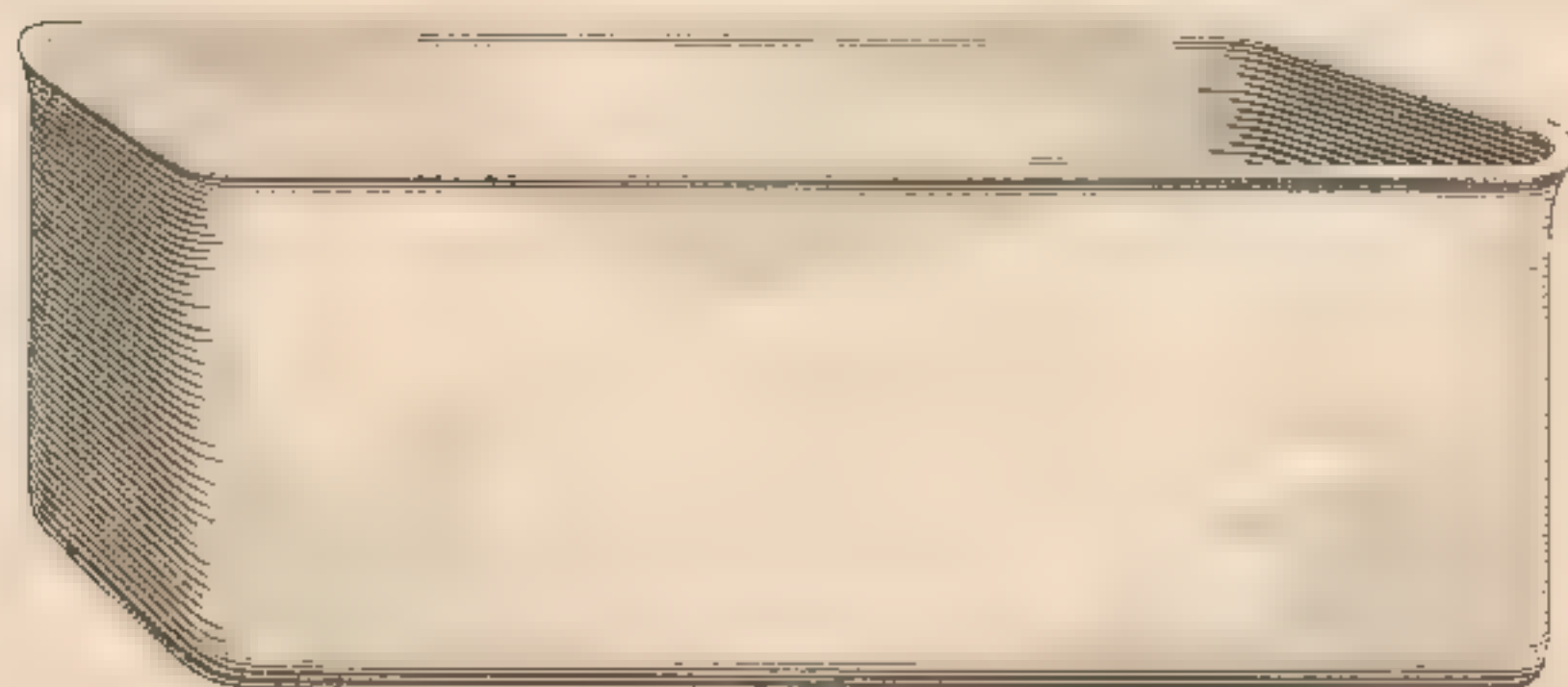
MACFARLANE'S PATENT ABLUTIONARY APPLIANCES

Nº 1 TROUGH



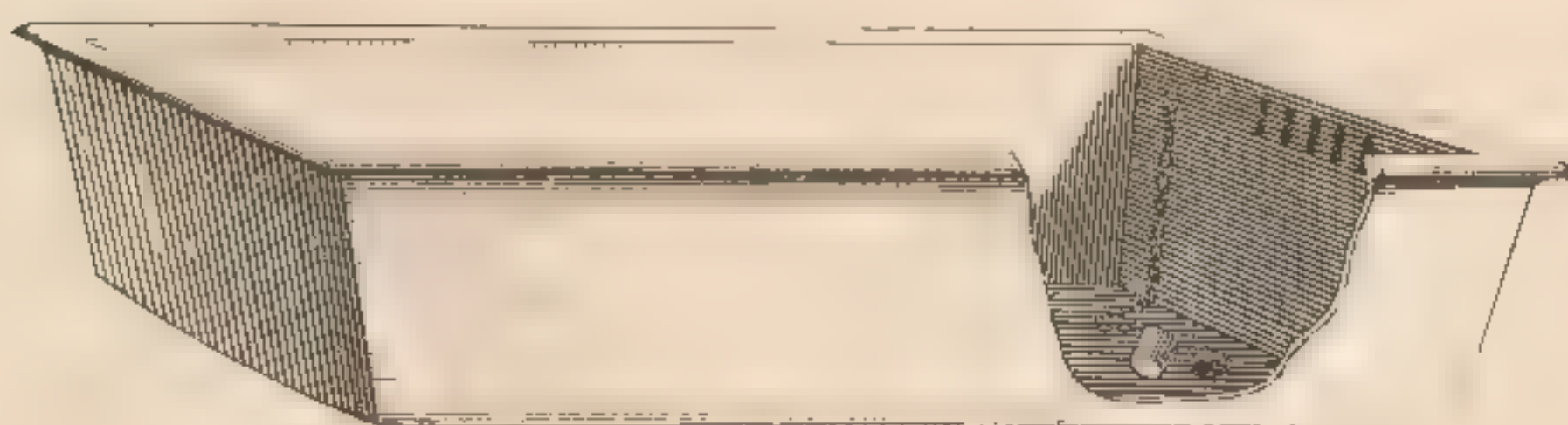
LENGTH	BREADTH	DEPTH
2 FT X	1 FT 8 INS X	0
4	8	0
6	8	0
9	8	0
12	8	0
2	2	4
3	2	4
4	2	4
6	2	4
9	2	4
12	2	4

Nº 4 TROUGH



LENGTH	BREADTH	DEPTH
2 FT X	1 FT 8 INS X	0
2	2	0
3	2	0
4	2	0
6	2	0

Nº 2 TROUGH WITH OVERFLOW & DISCHARGE PLUG



LENGTH	BREADTH	DEPTH
2 FT X	1 FT 8 INS X	0
3	8	0
4	8	0
6	8	0
9	8	0
12	8	0
2	2	4
3	2	4
4	2	4
6	2	4
9	2	4
12	2	4

Nº 3 TROUGH



LENGTH	BREADTH	DEPTH
2 FT X	1 FT 8 INS X	0
3	8	0
4	8	0
6	8	0
9	8	0
12	8	0
2	2	4
3	2	4
4	2	4
6	2	4
9	2	4
12	2	4

No. 3 Water Trough.—The water supply apparatus is self-acting, and consists of a float ball and cock, inclosed by sluice plate and cover, placed at one end, whilst at the opposite end are an overflow and discharge plug.

SANITARY ARRANGEMENTS,

FOR CONVERTING THE EXCREMENTARY REFUSE, DRY GARBAGE, ASHES, &c., OF TOWNS INTO THEIR PROPER AND MOST VALUABLE PURPOSES.

A PAPER READ BEFORE THE PHILOSOPHICAL SOCIETY OF GLASGOW, ON THE 8TH APRIL, 1857

BY WALTER MACFARLANE, ESQ., ENGINEER,

OF WALTER MACFARLANE & CO., SARACEN FOUNDRY, GLASGOW.

THE subject of this paper embraces a range of objects that to many minds may not be of the most inviting nature, but which, from various causes, has occupied a very considerable share of the writer's attention for many years.

If we reflect for a moment on the present condition of our large towns, as regards their sanitary arrangements, we may almost wonder that the mortality of their inhabitants is not even greater than it is, considering the many agents that are at work for destroying health and life. Such large masses of the population are now confined to so small a space, that it is absolutely necessary that arrangements suitable for this new order of things should replace the customs and rude contrivances of a past age.

In order that we may more clearly understand the subject of this paper, I have divided it into two distinct sections, treating first the liquid or sewerage portion, and then the dry garbage, ashes, &c.: my object being to separate and convert the materials contained in these two classes of town refuse into their proper and most valuable uses, and thereby not only add to the health, but also to the wealth of the community. How to purify and dispose of our town sewerage, is a problem that has been prominently before the public for many years; and, notwithstanding all that has been said and done in the matter, it seems as far from a practical solution as ever, so that, under these circumstances, information from whatever source is anxiously to be desired.

Before we can be expected to treat successfully upon any subject, it is necessary that we make ourselves thoroughly conversant with its leading features and general properties. The great want of success that has hitherto attended the efforts made to settle this question has, in my estimation, very much arisen from neglecting this. Most of the plans—indeed I may say all the schemes hitherto propounded, have taken, as the basis of their operations, the sewerage as it at present exists, without for a moment reflecting on the possibility of its being put into a better shape. I shall, therefore, before attempting to dispose of the sewerage, first inquire into its sources, and then propose such arrangements as will best suit for its collection and ultimate disposal.

MIDDENSTEDS AND PRIVIES.

The greatest portion of the excrementary matter of the community has hitherto been, and is at present, collected by middensteads and privies, and these receptacles, in the hands of the dustman, become, in too many cases, complete manure manufactories on a small scale. The entire removal of these objectionable repositories of filth cannot be too soon accomplished. To see, in a densely-populated community, and amongst so much apparent refinement, accumulations of this loathsome kind remain putrifying for months, is an evidence how blunted our feelings become by custom. These are by no means confined to the back closes and courts of the older parts of our larger towns, but are quite common in many of our educational establishments and public factories. Nay, even many of the fine suburban villas and country residences we see rising around us are no better off in this respect: and thus habits of filthiness grow up amongst the population.

I find—calculating as nearly as possible from the valuable statistical data of Dr. Strang—that in Glasgow, with a population of 400,000 persons, the excrementary evacuations of upwards of 300,000 of that number are collected in privies, and as chamber refuse discharged into middensteads, and are thus spread over an immense surface, where they lie putrifying and giving off, free and unimpeded, an amount of effluvia that is fearful to contemplate. To this cause alone we may impute much of the excessive mortality in our large towns. It is certainly time these rude and primitive arrangements were giving place to others more in keeping with the times we live in, and the advanced spirit of the age.

WATER CLOSETS

Water, from its great abundance and disinfecting properties, naturally provides us with the readiest means for collecting the

excrementitious matter of our dwellings. It cannot be too well known, that on the immersion of these substances in water, they cease to give off offensive odour, and to this cause we may impute the great increase that has taken place in Water Closets within the last few years. These vary greatly in form and construction, but their leading features are the same.

Impressed with the belief that a simpler and more efficient Water Closet was desirable, I have constructed one embodying these properties. (See Illustration page 571) It has a large water surface, into which the evacuations are at once discharged. It requires no bent syphon pipe. A hydraulic trap, above the discharge pipe, prevents the ingress of gases from the sewerage; and, by a peculiar construction of valve, it cannot be choked or flooded, and it is a valuable agent for flushing the drains in connection. It requires no cistern nor water pressure, is as efficient with an intermittent as with a constant supply of water, and requires less than any closet in use. The whole working gearing is entirely out of the control of the person using the closet, and no action of any part takes place except once a day.

It has been subjected to the most varied and trying situations in private dwellings, lodging houses, schools, reformatories, factories, barracks, hospitals, lunatic asylums, railways, streets, &c., for the last six years; and wherever it has been introduced, has given complete satisfaction, and is coming into general use throughout the kingdom and colonies.

PUBLIC CONVENIENCES

Water Closet and Urinal Conveniences, for the out-door male and female population of our streets and thoroughfares, should be amply provided by the authorities, in order to do away with Privies, and prevent the deposit of filth in out-of-the-way corners, and on streets and walls. Most of our large towns are now beginning to move in this direction, and are providing such conveniences.

Large numbers of our population are constantly on the streets; and if we wish to create habits of cleanliness and decorum, proper provision should be made for complying with the common necessities of our nature. If accommodation of this kind were provided in the various districts of our towns, a very great improvement might be expected to take place in the habits and customs of society. At present, generally speaking, no provision is made for the out-door male and female population, and thus their habits in this respect are much the same as those of the lower animals. Assuredly a duty rests upon our public authorities in this matter; and if they fail in providing the necessary accommodation, they are responsible for engendering amongst the population those filthy habits that pollute many of our finest buildings and streets at the present day.

We have much to learn, even on the point of common public decency and cleanliness; and it is much better at once to recognize and supply such wants, than to pass by what some may fastidiously consider a nasty subject. The neat ornamental style in which street accommodation of this kind can be supplied, and the freshness and cleanliness of the system removes any objections that may formerly have been urged against its adoption.

CESSPOOLS

Cesspools are another of the objectionable arrangements in towns. In some districts they have been extensively introduced, and they necessarily call for some remarks. Water closet and other refuse generally emptied themselves into these receptacles till within the last few years, the liquid portion overflowing and discharging itself into the nearest drain, river, or watercourse, whilst the solid portion was retained, and periodically cleaned out by buckets, but was as often allowed to lie stagnating for years. Cesspools may now, however, be considered amongst the things that were, the very general introduction of sewerage having superseded them. Our authorities should now see that they are properly cleaned out and filled up, as assuredly, if allowed to remain, they will be productive of the worst consequences.

SANITARY ARRANGEMENTS.

PRESENT SEWERAGE SYSTEM

I will now endeavour to describe the agency by which I propose to carry the excrementary matters out from the midst of the population, taking a brief glance at the present sewerage arrangements for that purpose. You are all aware that the sewerage of a town is at present understood to consist of the underground drainage, rain-fall, waste water, excrementitious matter from water-closets, and other liquid refuse from public works, slaughter-houses, &c. These form one general mass, that discharges itself into our rivers—a system altogether reprehensible, for in so doing we are just removing the filth of one part of the town to another part equally or more objectionable. If we examine the substances that enter the sewers, we shall find them differing in their nature the one from the other, and each requiring a treatment peculiar to itself. For these reasons, I have divided them into two classes, distinguishing the one class by the term *Watery*, and the other by the term *Excrementary*. The watery class, being composed of the underground drainage, rain-fall, and waste water of the community, is harmless, and of no value. The excrementary class, consisting of water-closet discharges, liquid refuse of public works, slaughter-houses, &c., is valuable, but destructive to human life, if allowed to lie for any length of time amongst the population.

The volume of water and other matters that flow through our sewers is immense, approaching, in a population of four hundred thousand persons, to from twenty to twenty five million gallons per day. This shows the utter hopelessness of operating upon such a mass with a view to purify or extract its fertilizing properties, and it is this that has suggested to my mind the absolute necessity of a better mode of collection before we can reasonably expect to free our rivers of their present impurities, and save to our country that wealth which in our ignorance we are throwing away. Of late years a change has taken place in our sewerage system, which has in many instances converted the sewerage to purposes it was not intended for—I allude more particularly to the receiving of water-closet and such like refuse, which formerly was retained in cesspools. Since the introduction of these matters, no extra provision whatever has been made for treating this new element, until the sewerage has become a nuisance of such magnitude as to demand our instant and energetic endeavours for its purification. By pursuing the course we have hitherto done, we act in two ways against the dictates of reason; first, we throw away matter which, if properly treated, would nourish those vegetable products from which the staple of our food is derived; and, secondly, we convert what has been given us for a cleansing and purifying agent into a loathsome stream of putrefaction, carrying in its watery emanations disease and death, and covering as with a plague some of the noblest highways of commerce.

Innumerable attempts have been made, and are now making, to free the sewerage of its dangerous, but valuable matters, before discharging into our rivers; but so long as such an immense volume of water requires to be operated upon, we can have no hope of a favourable result. It is computed that the solid excrement of the community is generally mixed with fourteen hundred times its bulk of water; or, in the words of Professor Way—"Ere we could obtain one ton of dry matter comparatively worthless, we would require to put three thousand tons of sewerage through an operation." A knowledge of these facts, combined with considerable opportunities of experimenting on the general bearings of this subject, have enabled me to arrive at conclusions that warrant me in believing that we are only entering the threshold to further discoveries of the value of the sewerage, and that the remodelling of our sewerage is imperatively required. I cannot but look upon this branch of our sanitary arrangements as in a state of the most primitive simplicity, and altogether behind the age we live in. Scheme after scheme have followed each other in rapid succession—many of these gave evidence of considerable ingenuity, whilst all have brought such an amount of information to bear upon the subject, as to give us the hope that the day is not far distant when we shall see that which is at present the fruitful source of disease and death, converted into a valuable nourisher of the vegetable kingdom.

NEW SEWERAGE SYSTEM.

The means I propose employing for carrying out this new system of sewerage is by adopting two separate and distinct sets of sewers, discharging the matters embraced by one section into what I have designated *Water Sewers*, and the matters embraced by the other section into what I have designated *Excrement Sewers*.

WATER SEWERS.

The Water Sewers would be wholly confined to the conveying away of the underground drainage, rain-fall, and waste water of the community. These being all in their nature harmless, and comparatively free of gross impurities, would be discharged into the nearest or most suitable river, without undergoing any operation farther than, if thought necessary, intercepting the solid matters they contain.

The position of the Water Sewers is shown at A, on the accompanying drawing (Fig. 1); and I would propose that the sewers at present in use for the general sewerage should be employed for this purpose; no alteration whatever would be required, further than to see that they are in perfect order, and in every case where cesspools exist in connection with them, they should be cleaned out and filled up. The general sewerage of most towns cannot be but in an imperfect state, from the fact that hitherto sewers have been laid down generally to answer special circumstances, rather than with a view to carry out any combined plan.

EXCREMENT SEWERS

Having thus stated my views as to the water sewerage, I will now proceed to explain the proposed Excrement Sewers. These being separate from, and additional to the Water Sewers, will of course require to be entirely new, and would be wholly confined to the carrying out from the midst of the population, water-closet and such other liquid refuse as from their nature are destructive to health, but may be converted to useful purposes. These sewers I would arrange in such a manner as that the solid portion would be retained by intercepting Ordure Tanks, whilst the liquid parts would flow off by means of pipe sewerage to some place or places where their valuable properties would be retained to the community. In order to carry out this scheme the following new works would be necessary:—1. Excrement supply sewers of glazed earthenware, connecting the water-closets with the Ordure Tanks; 2. Cast iron intercepting Ordure Tanks; 3. Excrement discharge sewers of glazed earthenware.

Fig. I. is a sectional elevation of one of the intercepting Ordure Tanks, as it would appear in actual operation.

Fig. II. is a plan of the apparatus, showing the top cover open.

The main central water sewer is at A. The excrement supply sewers, B, are for conveying the water-closet matters to the Ordure Tank. They are of the usual glazed earthenware, from four to nine inches in diameter, and placed on each side of the street, three feet below the ground, having branch connections from the water-closets, and all flowing into intercepting Ordure Tanks, D.

The intercepting Ordure Tanks, D, are of cast iron, of an oblong shape, about twelve feet long, three feet broad, and nine feet deep, divided into two compartments of equal size, to be wrought alternately.

The excrement supply sewers, B, discharge themselves into the tank from each side, by the double branch pipes, C, having at its outlets a stop-valve, E, actuated by a lever, F. A gutter, G, one foot wide by two feet deep, runs across the centre of the tank, into which the liquid portion overflows; and in the sides of this gutter is a sluice plate, H, by pressing down which the liquid flows to the discharge sewer, L, leaving the solid ordure in the Tank comparatively free from water, and ready for being emptied by the ordure waggon. A perforated plate, I, is fitted in each Tank, to prevent the grosser parts of the solid matter, including paper, straw, &c., from getting into the excrement discharge sewers. The man-hole doors, J, are level with the street, and hinged to meet in the centre, thus giving ample room to get into the inside at any time. An ordure discharge pipe, K, is in each compartment, having on the one end a screwed thimble, which fits the elastic hose of the ordure waggon. From twelve to twenty of these intercepting Ordure Tanks would be required in a population of 400,000 inhabitants. Each compartment holds from seventy to eighty cubic feet of ordure, more or less mixed with water. They would require to be emptied once or twice a day, each load weighing about two tons, the daily weight, of course, depending on the extent to which the water could be withdrawn.

Fig. I. represents one of the compartments of the Tank filled with ordure, the surface water withdrawn, and the elastic hose attached, ready for discharging the accumulations to the Ordure Waggon (Fig. III.) The other compartment is receiving the matters from the excrementary supply sewers, B, the solid parts precipitating to the bottom, whilst the liquid parts, on passing through the sluice-plate, I, and running over the lip of the centre gutter, G, thus flow off to the excrementary discharge sewers, L.

The excrement discharge sewers, L, are made of the usual glazed earthenware, averaging from 12 to 24 inches diameter, and placed about 6 feet below the ground level, for conveying the liquid that flows from the intercepting Ordure Tanks, to proper receptacles or reservoirs out of the town.

ORDURE WAGGON.

The Ordure Waggon (Fig. III.) is for emptying the Ordure Tanks of their solid accumulations, and conveying the matter to the manure depot. It is an excellent application of the atmospheric principle to such purposes. It consists of a spring waggon, A, on which rests a cylindrical iron tank, B, three feet in diameter by ten feet long; and above this are two lateral tubes, C, one foot three inches in diameter by eight feet long, receiving the gases disengaged from the matters during the charging. A projecting pipe, D, is on the back, on which is placed an index, E, to show the degree of vacuum produced by the pumps, G, mounted on each side of the machine. Each of the pistons of the two pumps is driven by an eccentric, H, mounted on the axle, I, of the back wheels. As this waggon travels along the streets, the action causes the rotation of the eccentric fixed on the wheel by the pin, J. The pistons of the two pumps are guided in their rectangular working by the two vertical rods, K, which slide parallel in the two guides, L, fixed on each side of the upright frames, M.

Upon the two ends or covers of the pumps are attached two tubes, N; each contains a spring valve, opening from the end inwards, for the suction, and another tube, O, with the valve opening outwards, for the discharge or descent, the pumps being double acting, each end having one valve for suction, and one for the discharge. The result is by the aid of elastic tubes screwed to the pipes N, and the other end connected to the pipe with two branches, P, on the top of a chest with an exhaust valve, the exterior of each pump is thus put in connection with the Tank. Supposing, then, that the Waggon is set in motion, and starts from the manure depot, the air and gases in the cylinders will be driven to the outside, and a vacuum is produced before the Waggon arrives at the intercepting Ordure Tank. A connection is then made by coupling

SANITARY ARRANGEMENTS.

an elastic hose to the back of the circular disc-valve, Q, and the ordure discharge pipe, K (Fig. I.) The conductor has then nothing more to do than to pull the lever, R (Fig. III.), and the ordure in the Tank empties itself into the Waggon almost instantaneously. When the Waggon is full, he again stops the connection by the lever, R, uncouples his hose, and drives off and delivers the contents at the manure depot. Thus the whole operation of emptying is the work of a few minutes, and without giving the slightest offence to either our sense of smell or sight. This system of emptying these matters has been in extensive use for several years in the United States, and has been introduced into Paris within the last twelvemonth with great success.

By this system of excrement sewers, in a population of 400,000, there would only be about 2,000,000 gallons of excrementary sewerage daily, or as much as would fill a sewer from 18 to 24 inches diameter, running at the rate of two miles per hour. No paper, rags, straw, nor other insoluble matter being mixed up with it, there would be no greater difficulty nor expense attending its transport and disposal than the same quantity of water, whilst being so concentrated, its value to the agriculturist would be increased. The solid matters recovered from the Ordure Tanks might be converted into a concentrated dry portable manure, of much value.

Were it considered desirable, a large amount of human excrement could be obtained in a comparatively pure state, of much value, and without creating the slightest smell, as Ordure Tanks of a small kind could be placed underground, adjacent to each of our public street Conveniences, into which the accumulations would be discharged daily, and comparatively free of water. Small tanks could also be placed at each of our street Urinals, and in this case the Urinal would be kept perfectly free of water. The same means of emptying these tanks would be employed as in the large ones in connection with the sewerage. It is still, however, matter for consideration whether or not all the excrementary refuse should go into the excrementary sewers.

These are my views as to how the excrementary refuse of our towns should be carried out from the midst of the population. By thus keeping the excrementary matters by themselves, and separating the liquid from the solid parts, we put them into the best state for converting them to their most profitable use. In a population of 400,000, with the present sewerage system there are about 22,000,000 gallons of sewerage daily, or in bulk as much as would fill a stream 5 x feet wide by three feet deep, running at the rate of two miles per hour. The great expense attending the transit of such an enormous volume of water, has hitherto prevented the sewage in a liquid state from being disposed of to agriculturists, although an almost universal opinion seems to prevail that this is the best and most profitable mode of using it. When freed, however, from such an enormous quantity of water, much of the difficulty which has hitherto prevented it from being profitably turned to account will be removed.

FIG. I.

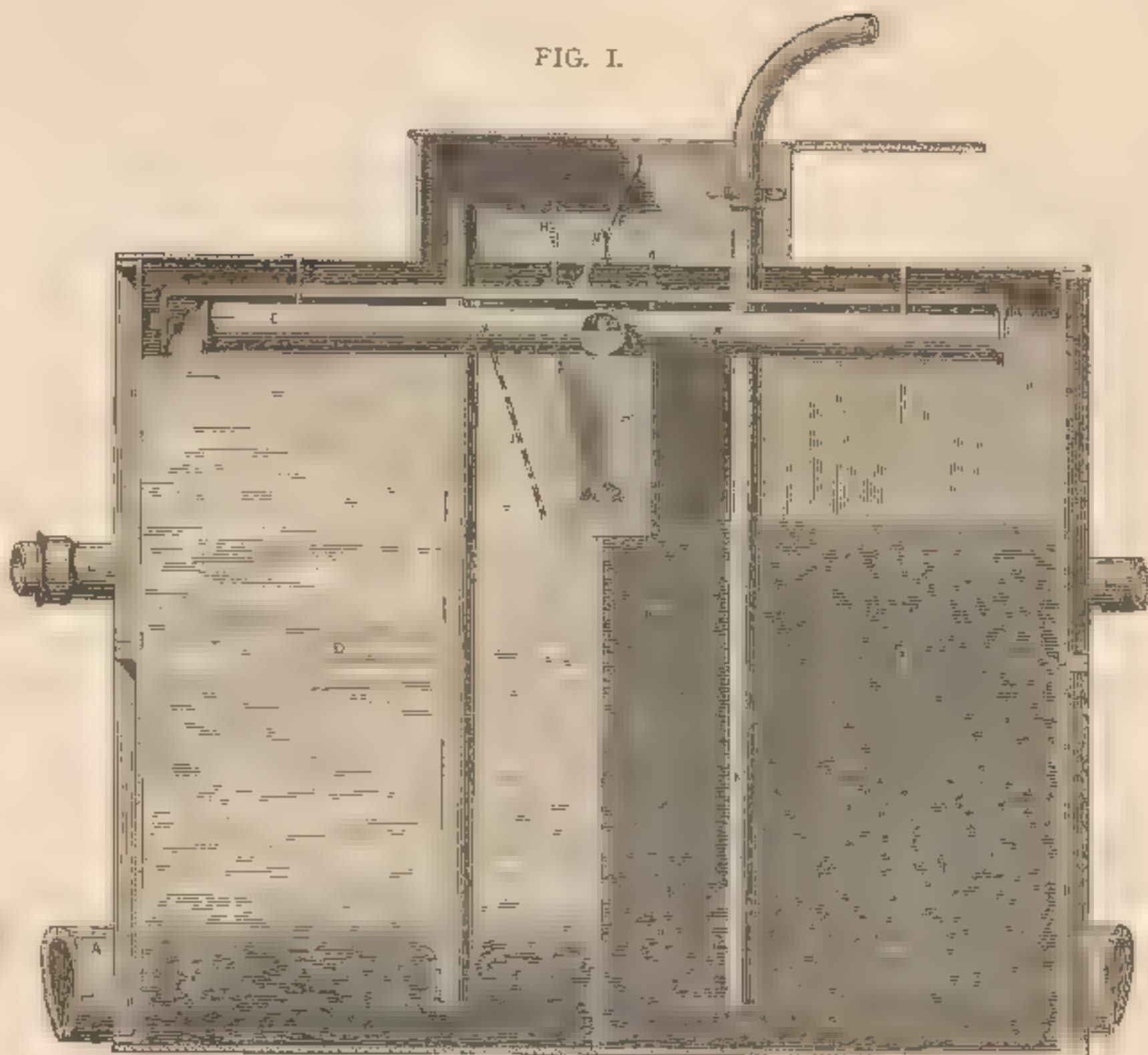


FIG. II.

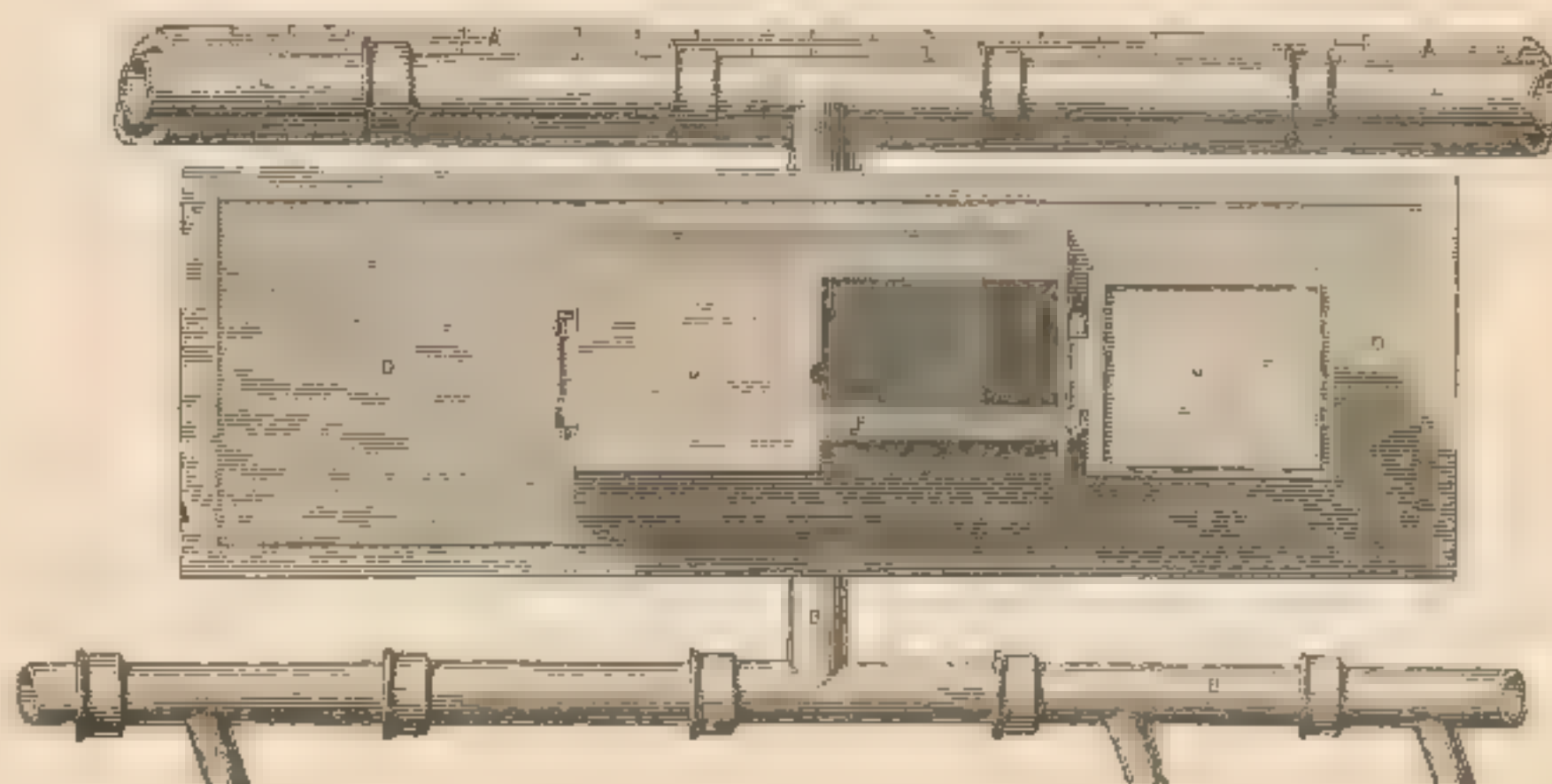
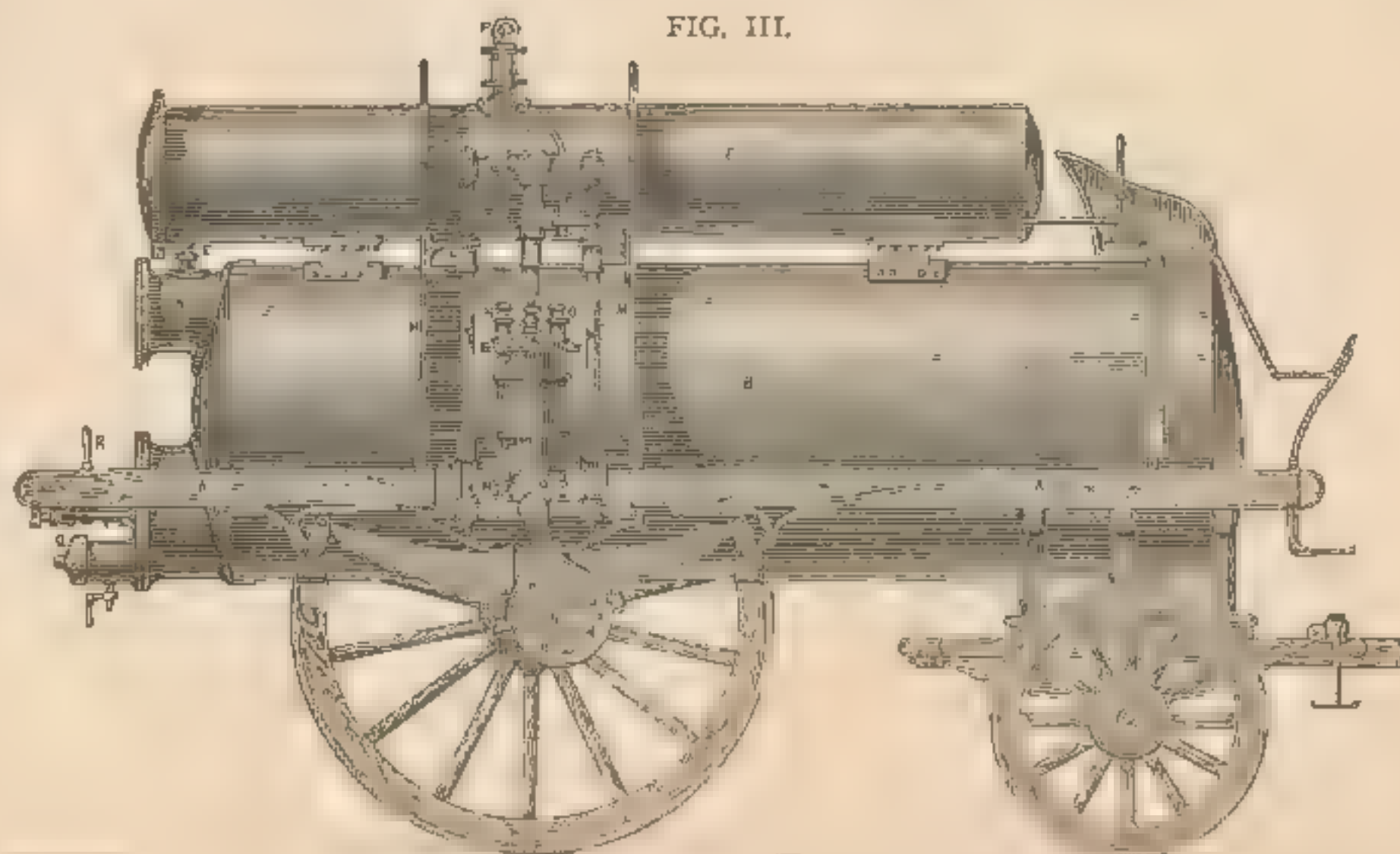


FIG. III.



SANITARY ARRANGEMENTS

DRY GARBAGE.

Having thus stated my plans for re-modelling the sewerage, and treating the liquid and excrementary matters of the community, I shall now take up what I have designated the dry section of my subject.

It is impossible to carry out any really efficient measures, having for their object the purification of our towns and rivers, without thoroughly overhauling the whole subject of town cleansing; the liquid and dry refuse being so mixed up with each other, it is necessary, if the one is to be dealt with, the other must be also.

The present arrangements for collecting the dry garbage, ashes, sweepings of our houses, &c., are in exactly the same state as they have been for hundreds of years. Why such should be the case, is a matter worthy of the most earnest inquiry, as it is a question of life and death to thousands of our teeming population. It appears to me that one cause of this anomalous state of things is that the uninviting nature of the subject is such as to prevent its getting that attention which other departments of our sanitary arrangements have received. Another cause may be the vested rights of individuals, preventing our authorities acting in the matter. If this is one of the obstacles, the sooner it is removed the better. No doubt the rights of private property must be respected; but whenever the exercise of these rights interferes with the general welfare of the community, then it becomes the duty of those in authority to step in and cure the evil.

Nothing can be more destructive to health, and repulsive to our feelings, than the present state of the middensteads throughout the kingdom, as they are not only receptacles for the dry garbage, ashes, sweepings, &c., but in many, indeed most cases, they receive all the chamber refuse of the dwellings, as well as the excrementary matters from privies, all the substances lying putrifying for months, to the great injury of the community. Had time permitted, it would

have been an easy matter to prove this, by what is taking place around us every day, but information is now getting so widely diffused on this question, that I believe there is little need for pressing further the adoption of better arrangements.

Before entering into this part of our subject, it will be necessary to keep in mind that the dry garbage of a town is understood to consist of the ashes, sweepings, vegetable refuse, &c., of dwellings, courts, streets, &c.; and to collect these waste matters to the best advantage, both as regards health and economy, is the first object in view.

ASH BINS.

Ash Bins of cast iron, for receiving the dry garbage, ashes, &c., and to hold not more than a load, should replace the present large and unsightly middensteads. These would necessarily be of various kinds, and be above the ground. For these Ash Bins I have constructed a cast iron sliding door, with a hopper in the centre, through which the ashes, &c., pass, and a peculiar lock, to prevent any person but the attendant having access to the inside. By sliding the door to one side, the accumulations can be periodically discharged. (Fig. 36.)

COMPOSITION OF THE DRY GARBAGE, ASHES, &c., OF TOWN DWELLINGS.

Much valuable material is lost on account of the dry refuse being mixed up with excrementary refuse; and in order to show this, I have analyzed four different classes of dry garbage, ashes, &c., taken from 1st, 2d, and 3d class dwelling houses, and from office premises, the ashes being passed through a $\frac{3}{4}$ -inch wire sieve or riddle. The following table gives the result:—

	1st Class Dwellings.	2d Class Dwellings.	3d Class Dwellings.	Counting Houses.	TOTAL.	Rate.	Amount
	Cwt. qrs. lbs.	Cwt. qrs. lbs.	Cwt. qrs. lbs.	Cwt. qrs. lbs.	Tons. cwt. qrs. lbs.	# Cwt.	£ s. d.
Ashes,	18 1 18 $\frac{1}{2}$	15 3 8 $\frac{1}{2}$	22 2 25 $\frac{1}{2}$	8 3 27 $\frac{1}{2}$	3 5 3 23 $\frac{1}{2}$	1	0 4 2 $\frac{1}{2}$
Vegetables,	2 2 11	2 2 1	2 2 4	1 3	1 15	1	0 2 0 $\frac{1}{2}$
Coals, Cinders, and Wood,	4 2	2 2 1	1 2	1 3	9 2 4	2 $\frac{1}{2}$	0 2 0 $\frac{1}{2}$
Bones,	1	7 $\frac{1}{2}$	5	13 $\frac{1}{2}$	13 $\frac{1}{2}$	6/3	0 1 6
Rags and Rope,	5	7	14	6 $\frac{1}{2}$	1 4 $\frac{1}{2}$	4/8	0 1 2 $\frac{1}{2}$
Paper,	10	10	18	18	2	2 3	0 1 1 $\frac{1}{2}$
Iron,	17	17	17	17	17	3 3	0 0 11 $\frac{1}{2}$
Brass,	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	69/4	0 0 9
Lead,	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	2 $\frac{1}{2}$	21/	0 0 5 $\frac{1}{2}$
Crystal,	1	1	1	1	1	9/4	0 0 1
Bottles,	8	8	8	8	8	1/	0 0 0 $\frac{1}{2}$
Earthenware,	14	14	7	21	21	..	0 0 0 $\frac{1}{2}$
Total Weight,	23	19 2	25	10 2	3 17 3 26 $\frac{3}{4}$		0 12 4 $\frac{1}{2}$
Value per Ton,	2/8	3/3	2/6 $\frac{1}{2}$	4, 1	2/10		

The quantity of dry garbage, in a city of 400,000 inhabitants, I have estimated at 40,000 tons per annum, irrespective of the street sweepings. This, however, must be considered only as an approximation.

In concluding this paper, I may be permitted to state, that for the last six years I have been unremittingly engaged in perfecting this scheme. The outlay incurred in experimenting and otherwise has been great; but I have the high gratification of believing, from the success that has hitherto attended my efforts, that these have

not been in vain—and I am sanguine as to their ultimate and complete realization. I have now the pleasure of inviting the public generally, and Boards of Health and Municipal Authorities in particular, to the prosecution and speedy accomplishment of this important sanitary reform.

It will be observed, on perusing this paper, that the writer has wholly confined himself to the mechanical section of the subject, and has left the ultimate disposal of those matters when collected an open question.

SECTION XIII. URINALS.

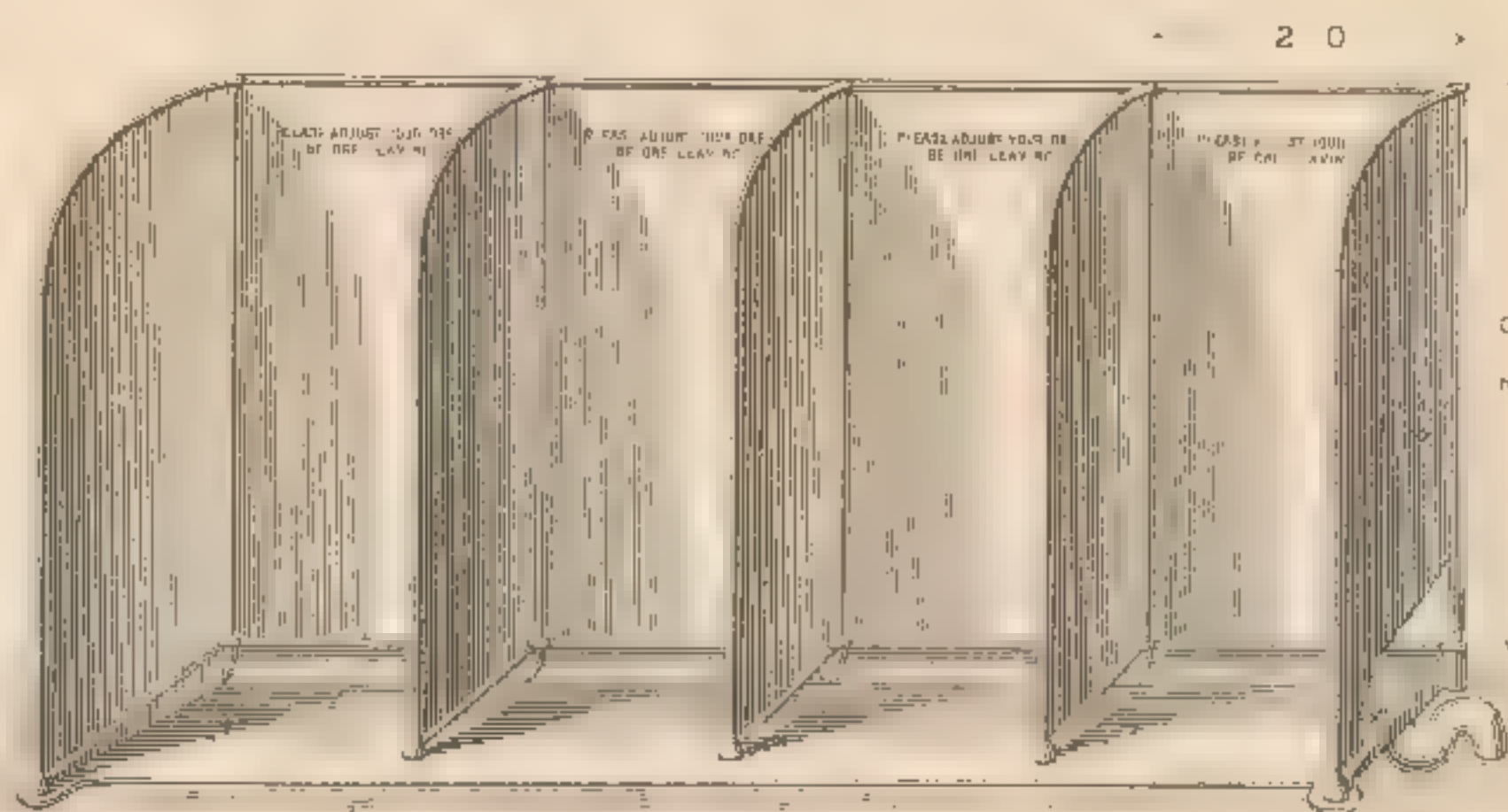
MACFARLANE'S PATENT URINALS

Amongst the many vital improvements we have lately introduced in the construction of our Urinals, we particularly call attention to the ornamental perforations in the walls, by means of which currents of fresh air are admitted from all quarters into the Urinals, thereby keeping them fresh, and free from odour. The various kinds which we illustrate can be modified in many ways to suit particular situations; in many cases it will be found convenient to combine them with the closets, and with the view of more clearly illustrating this, we refer to page 592 for examples.

No 1 FOR ONE PERSON



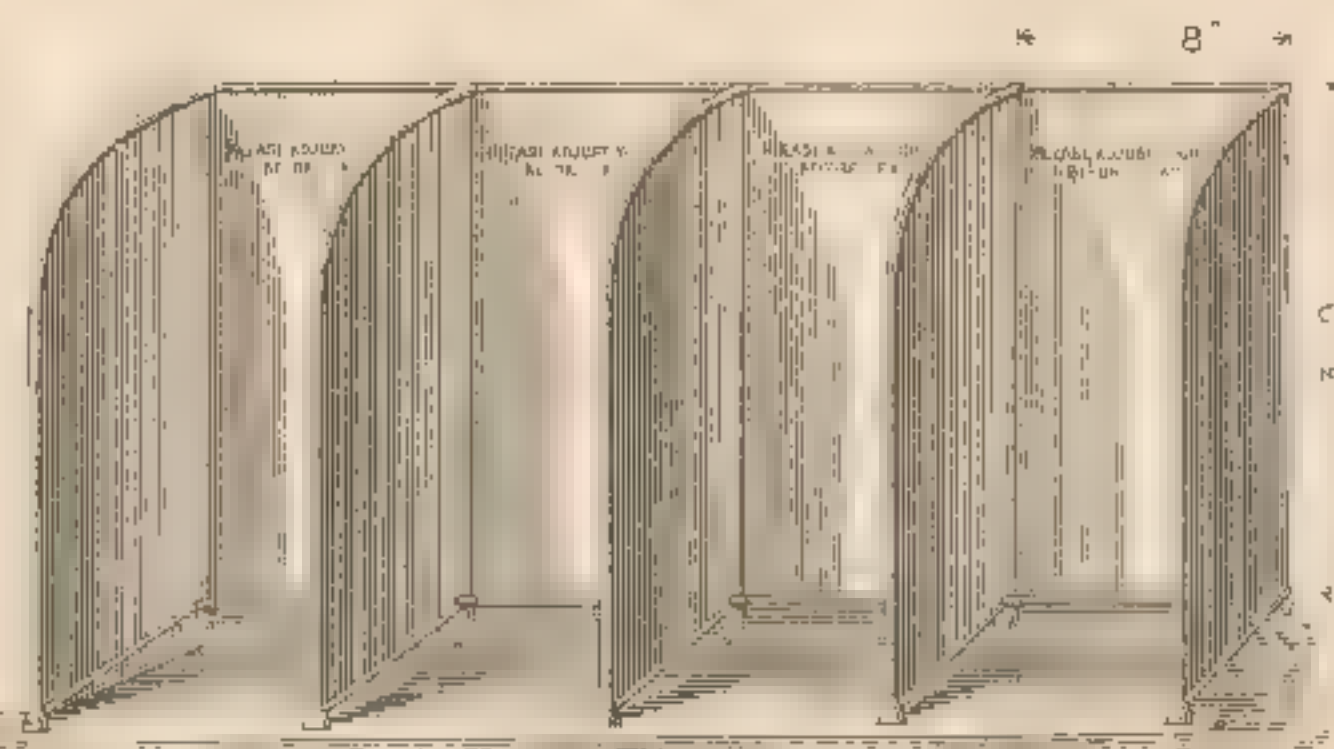
No 1 RANGE



No 2 FOR CORNER

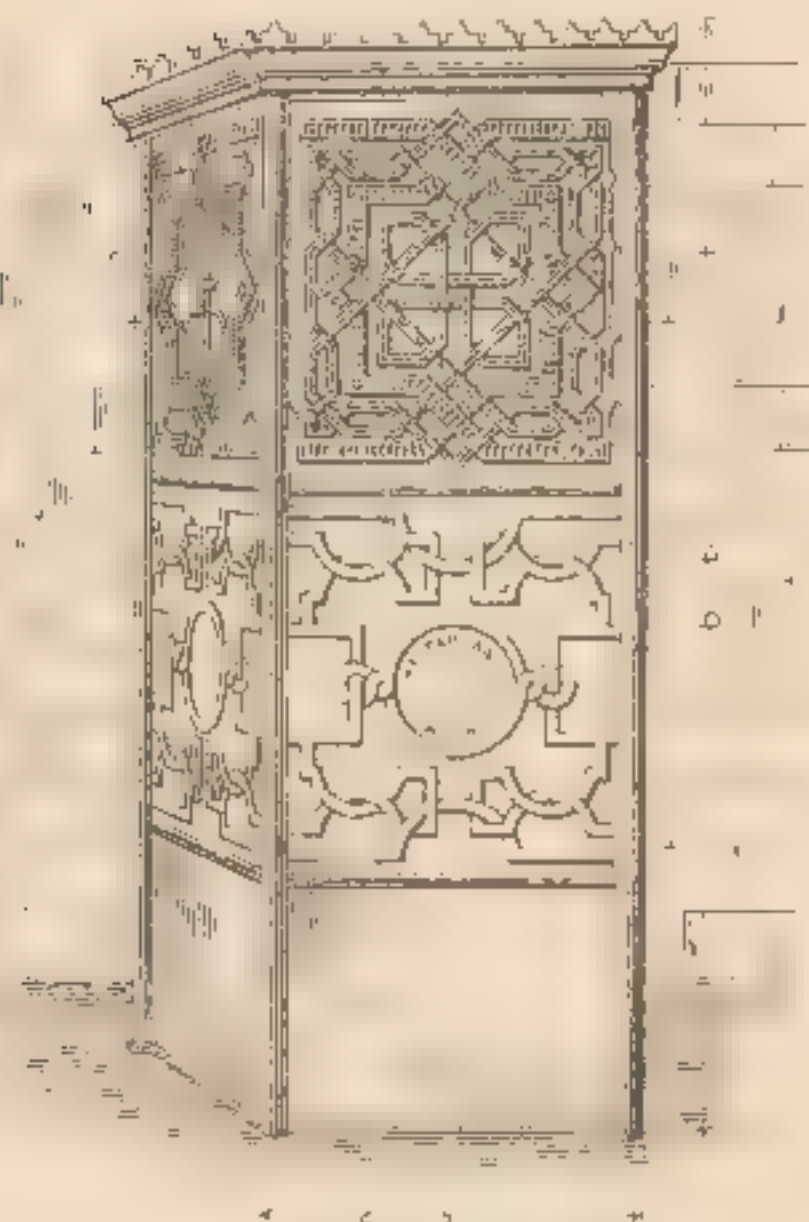


No 7 RANGE

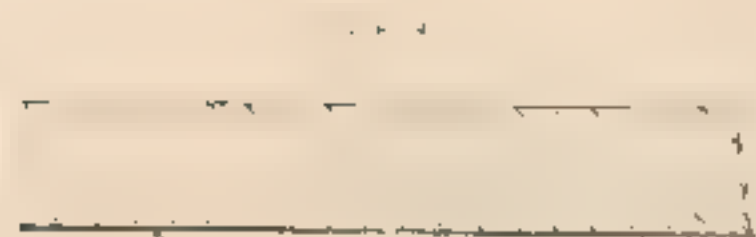


Nos. 1 & 7 Urinals, each consists of an upright back, with projecting divisions resting upon a sole plate, attached to which is a syphon trap connecting with the sewers.

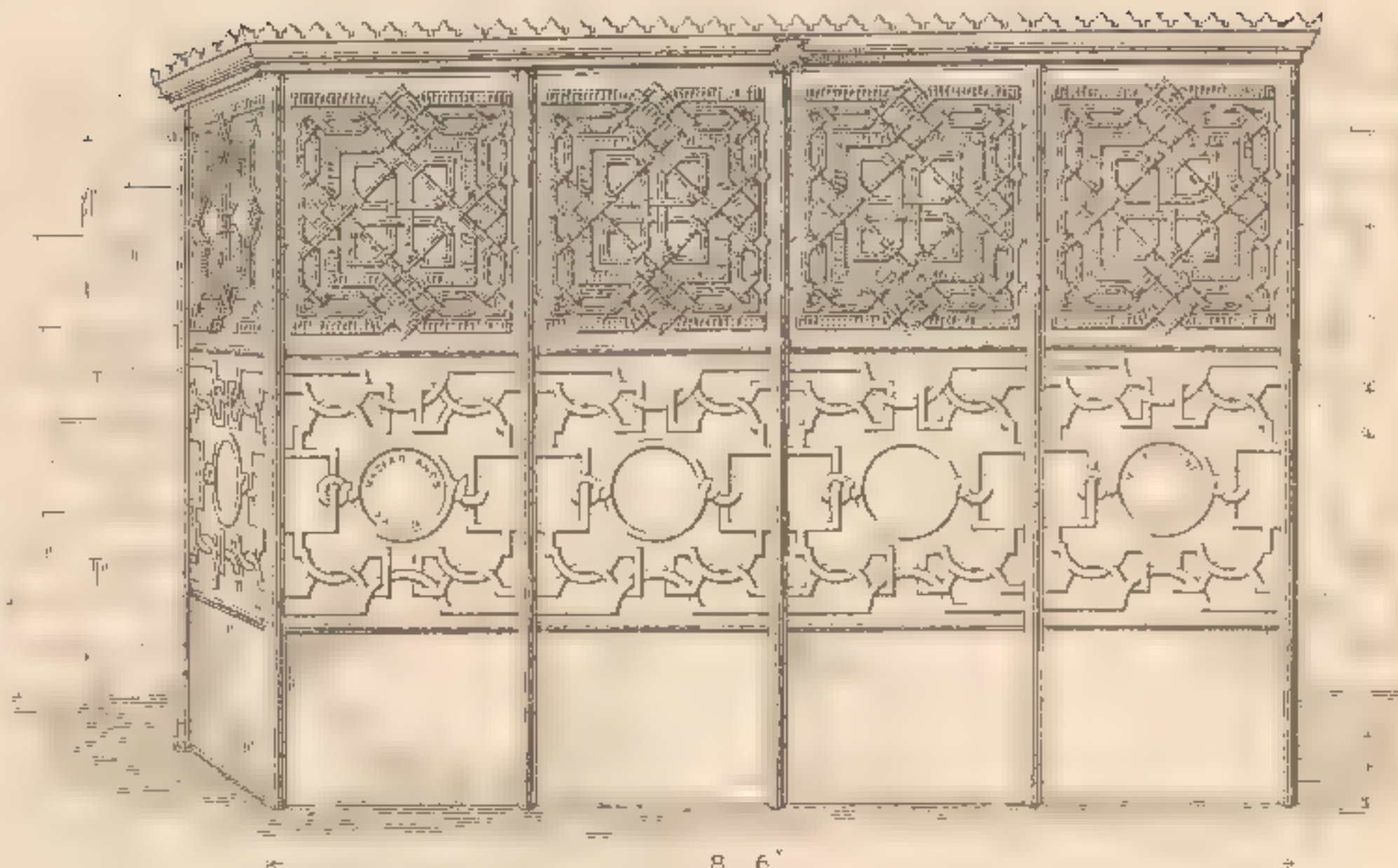
NO 5 FOR ONE PERSON
BACK ELEVATION



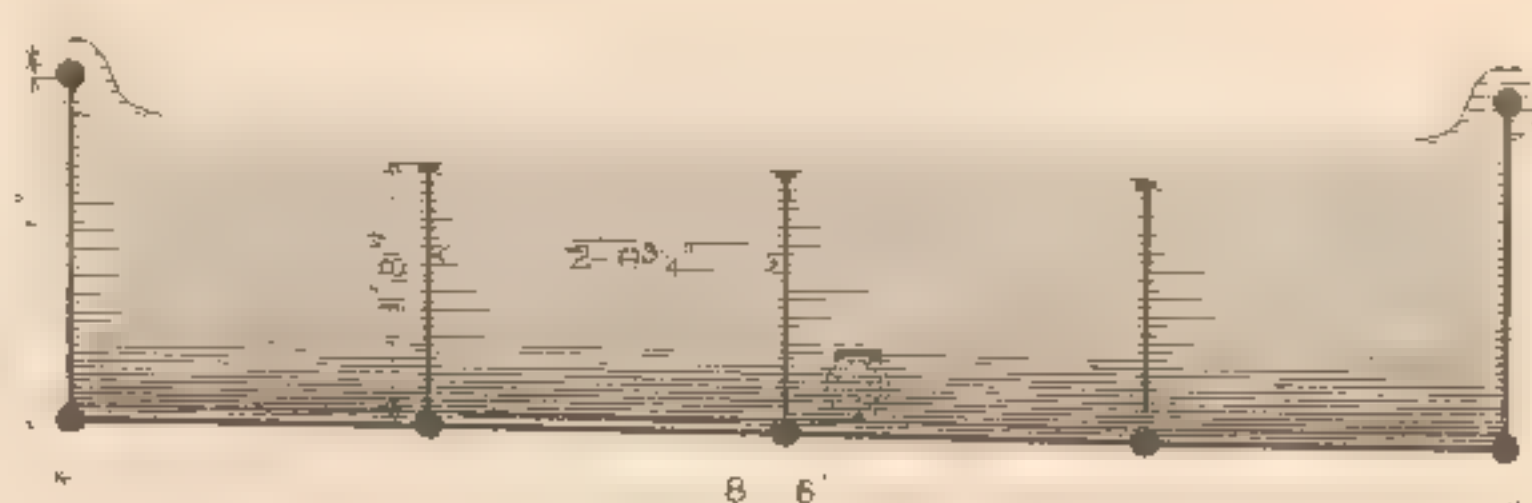
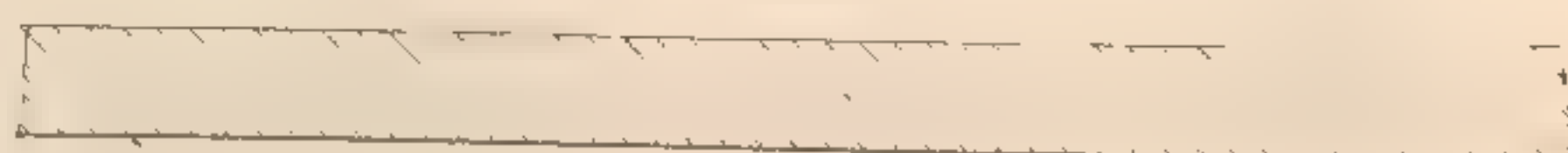
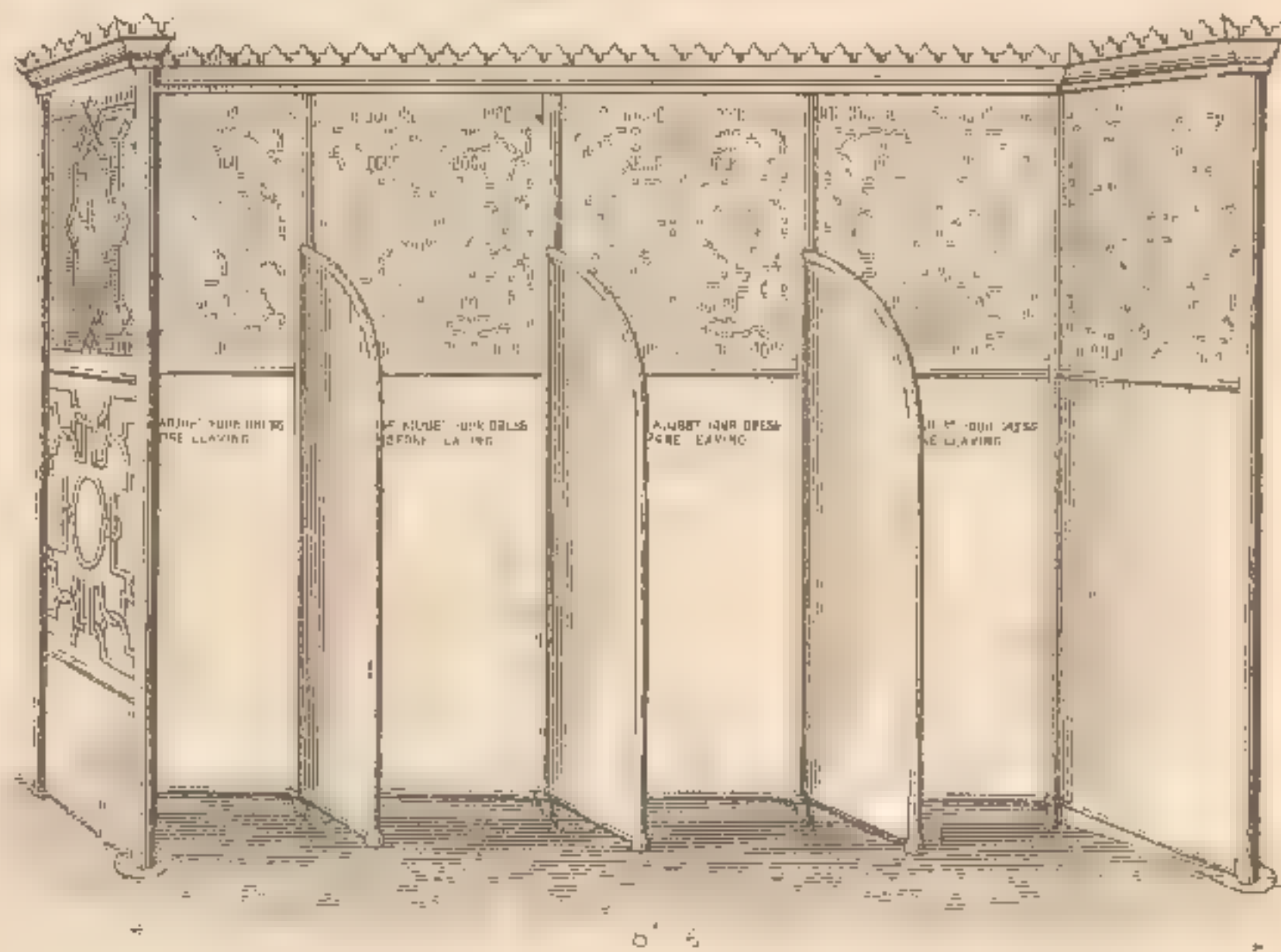
FRONT ELEVATION



NO 5 RANGE
BACK ELEVATION

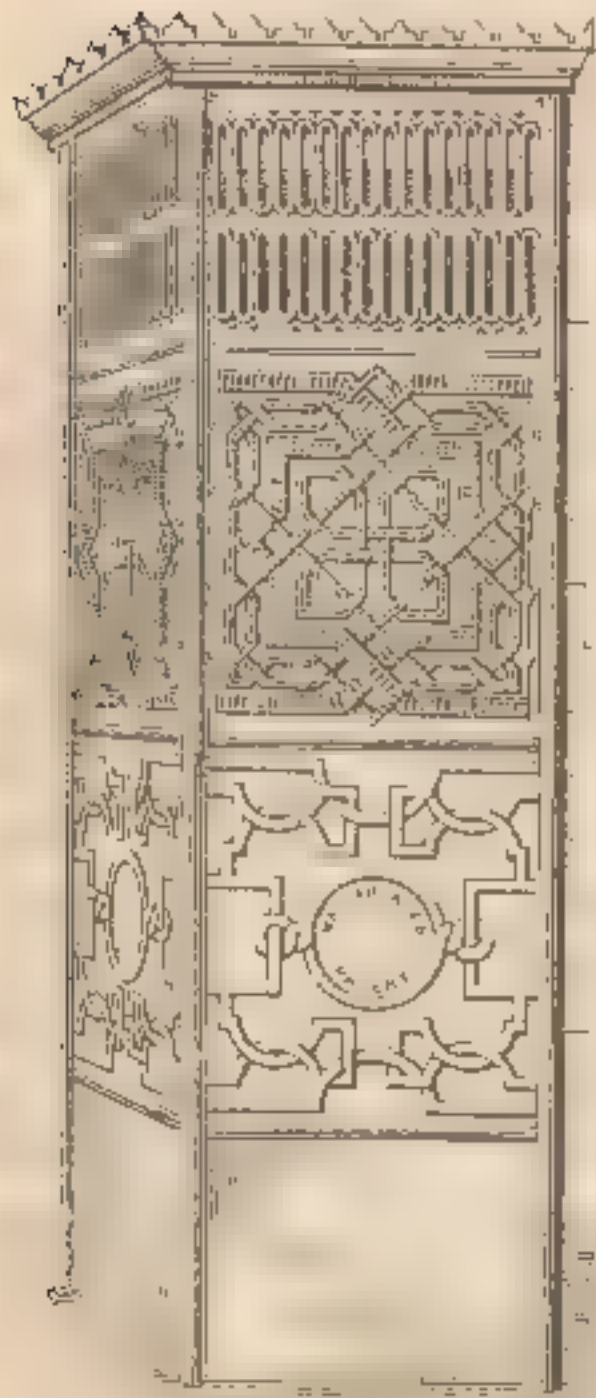


FRONT ELEVATION

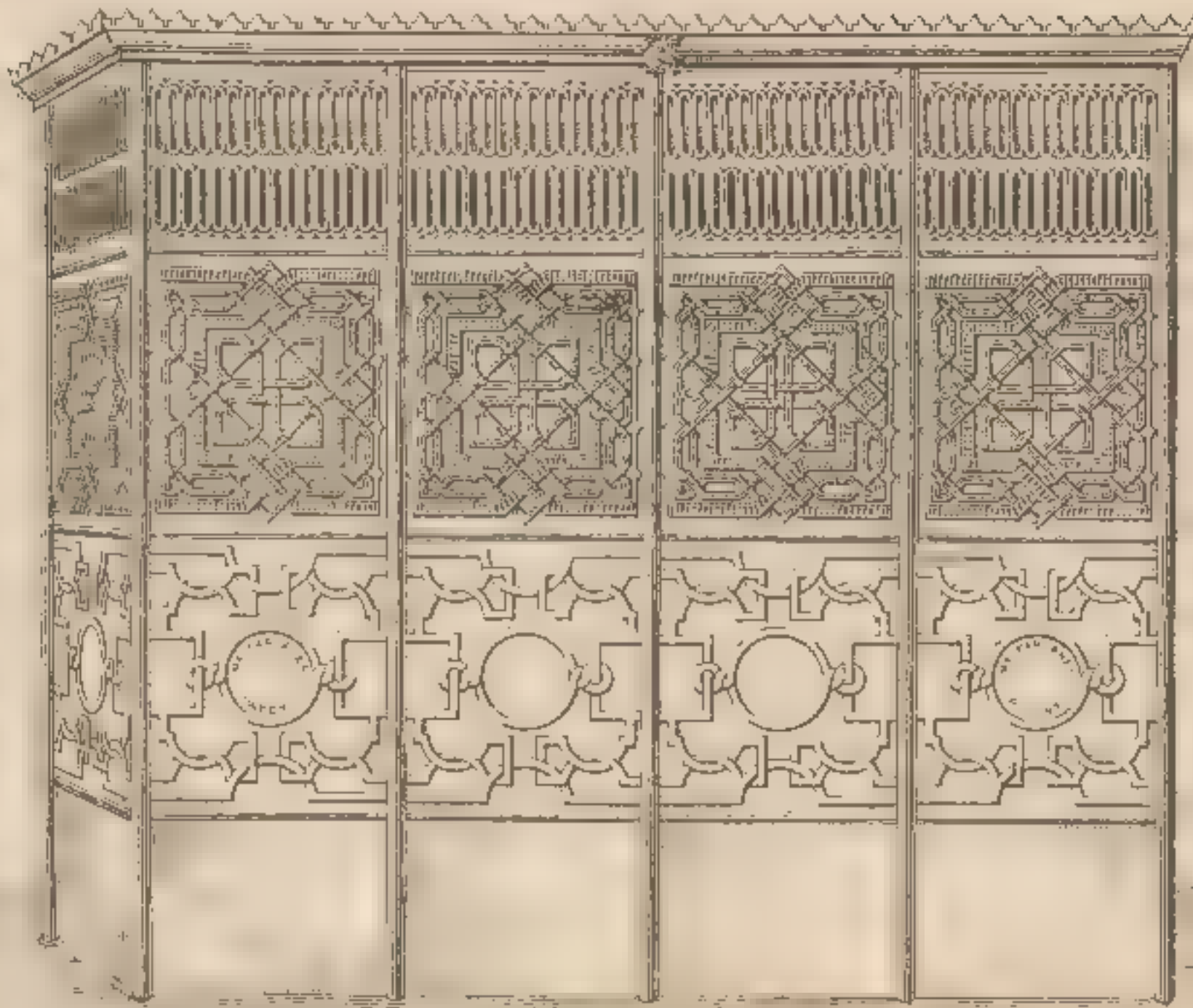


No. 5 Urinal consists of an ornamental wall, the upper portion of which has perforated ventilating plates, the whole resting on a sole plate, attached to which is a syphon trap connecting with the sewers.

NO 4 FOR ONE PERSON
BACK ELEVATION



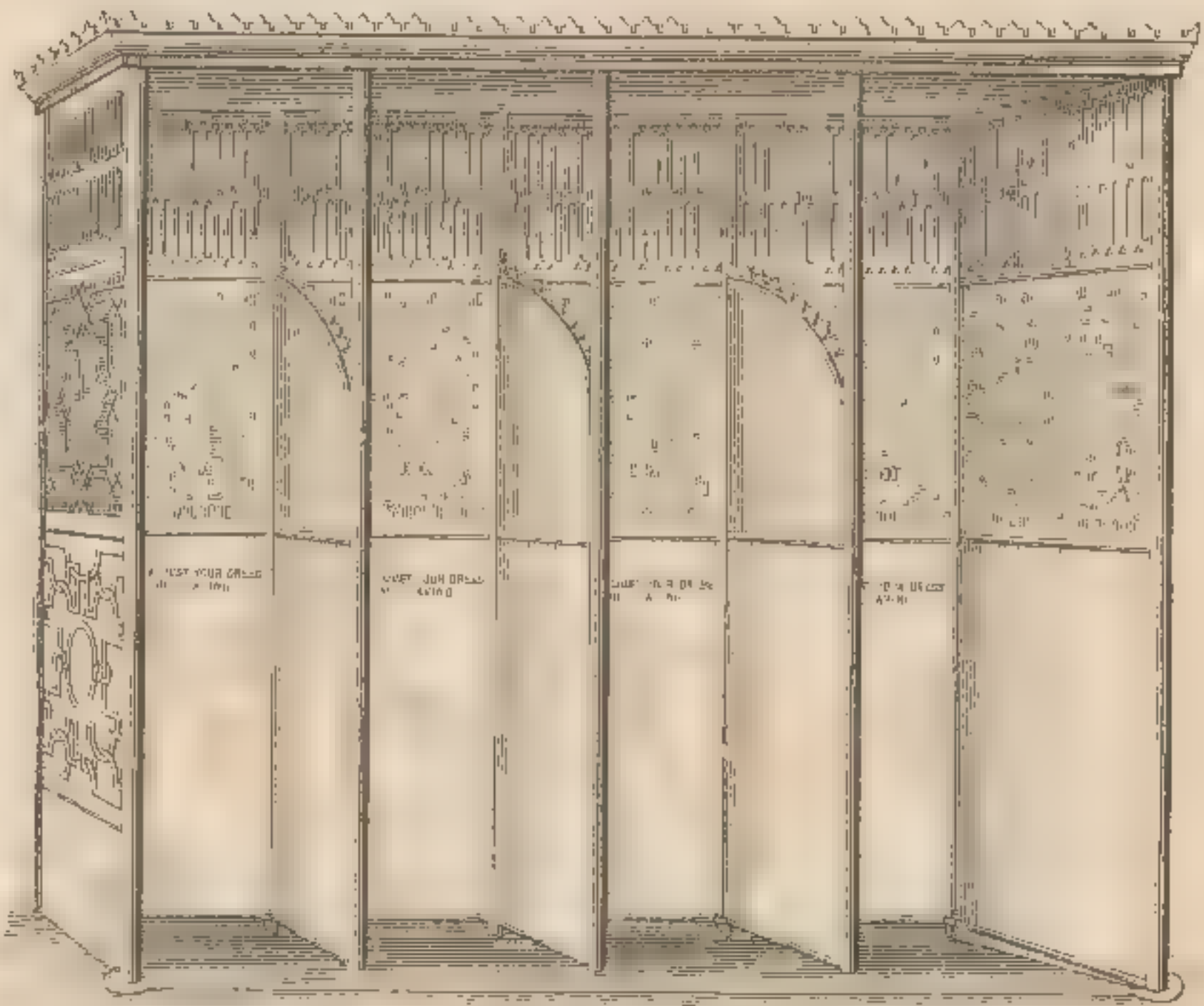
NO 4 RANGE
BACK ELEVATION



FRONT ELEVATION



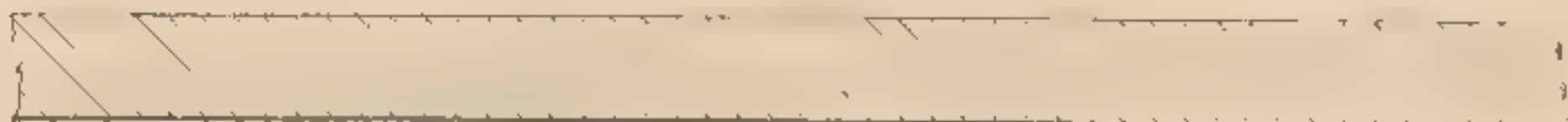
FRONT ELEVATION



PLAN



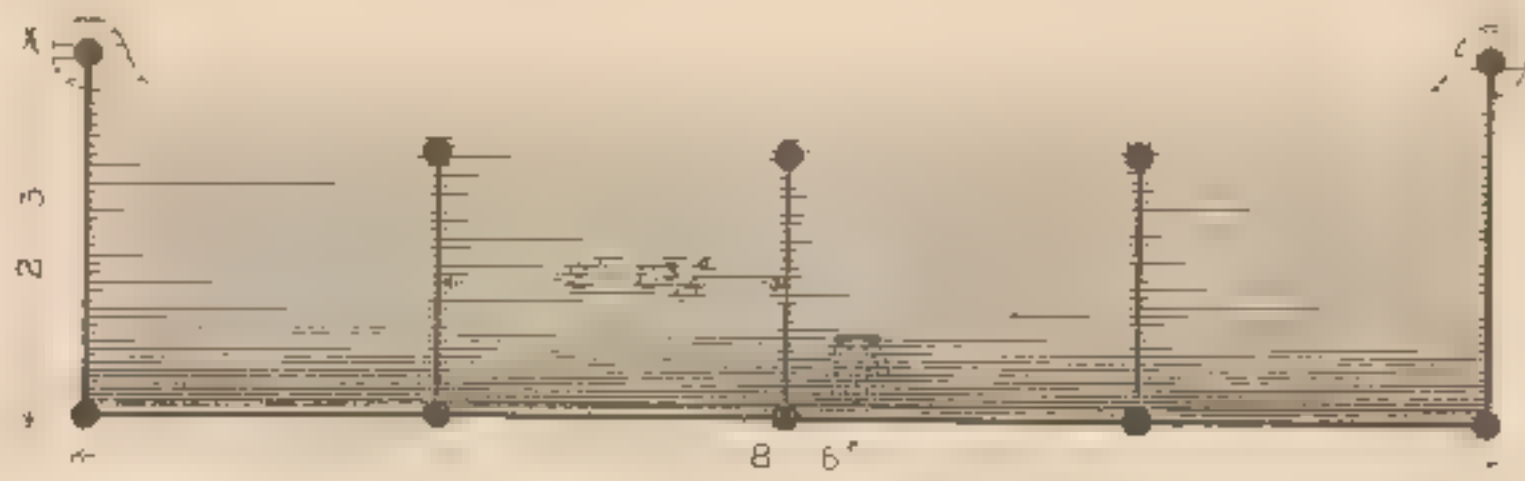
PLAN



SECTION



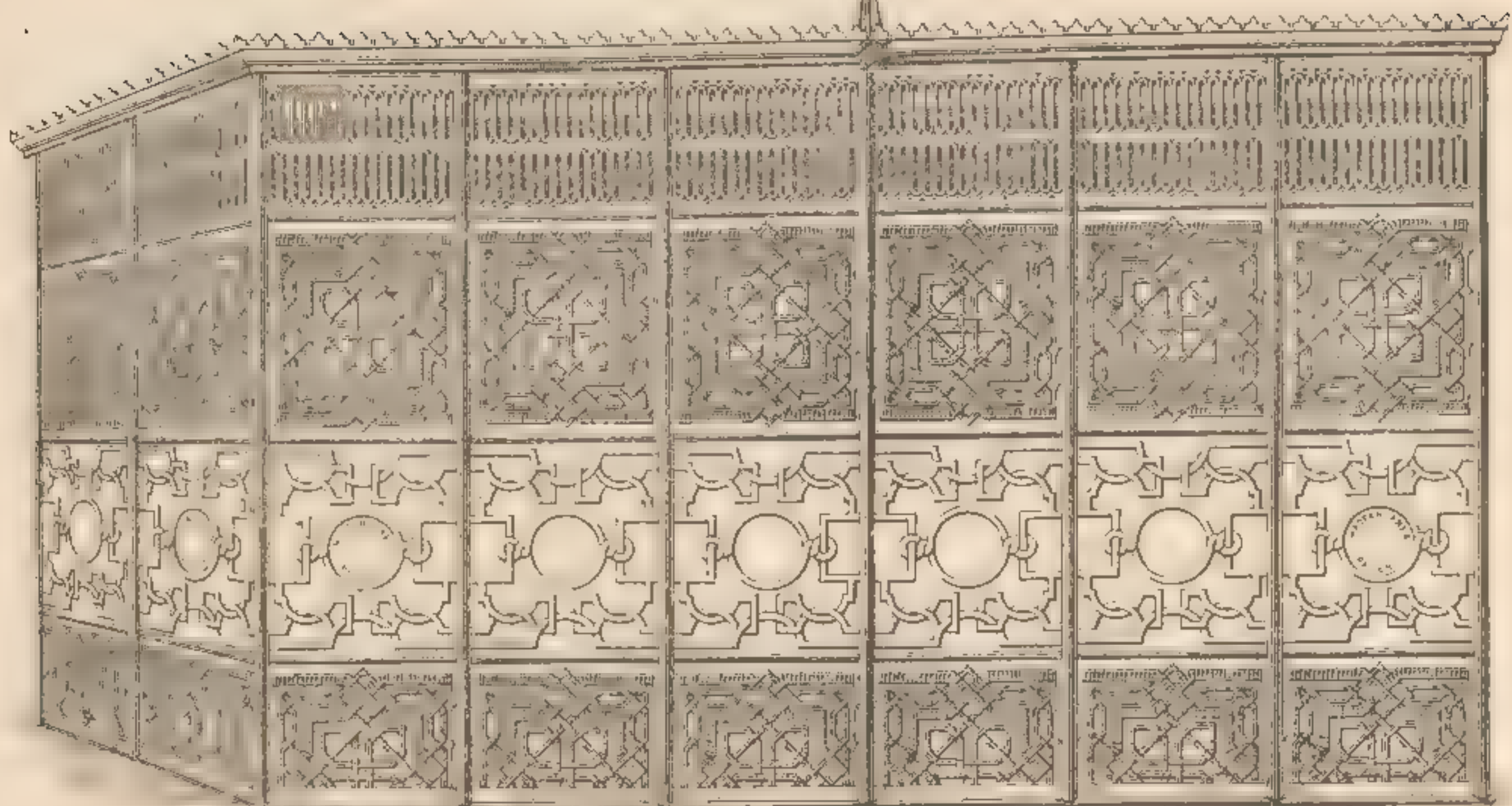
SECTION



No. 4 Urinal is of the same construction as No. 5, but the walls are higher, the divisions deeper, and it has a roof to protect the person from the weather.

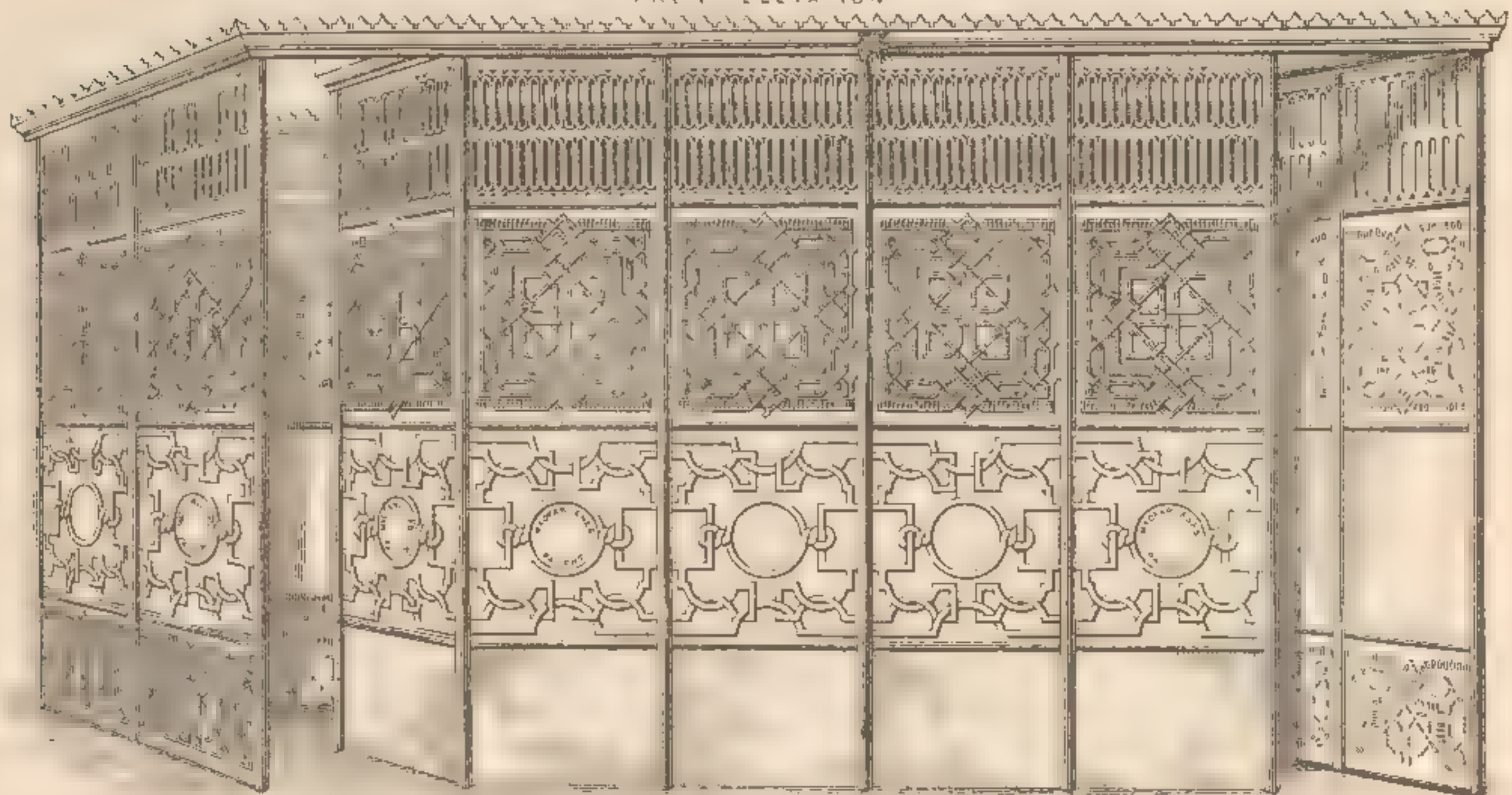
NO 6 RANGE

BACK ELEVATION



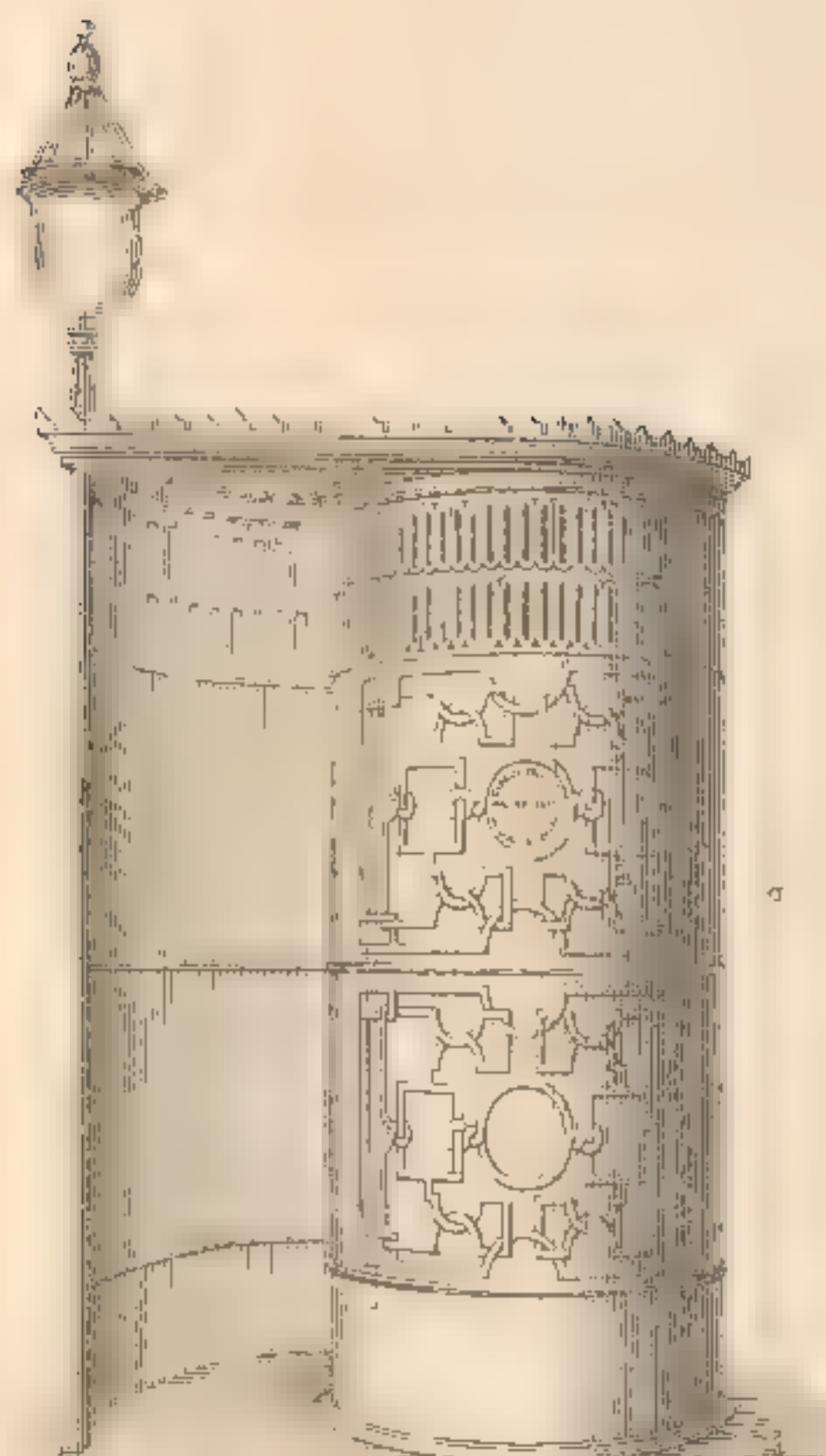
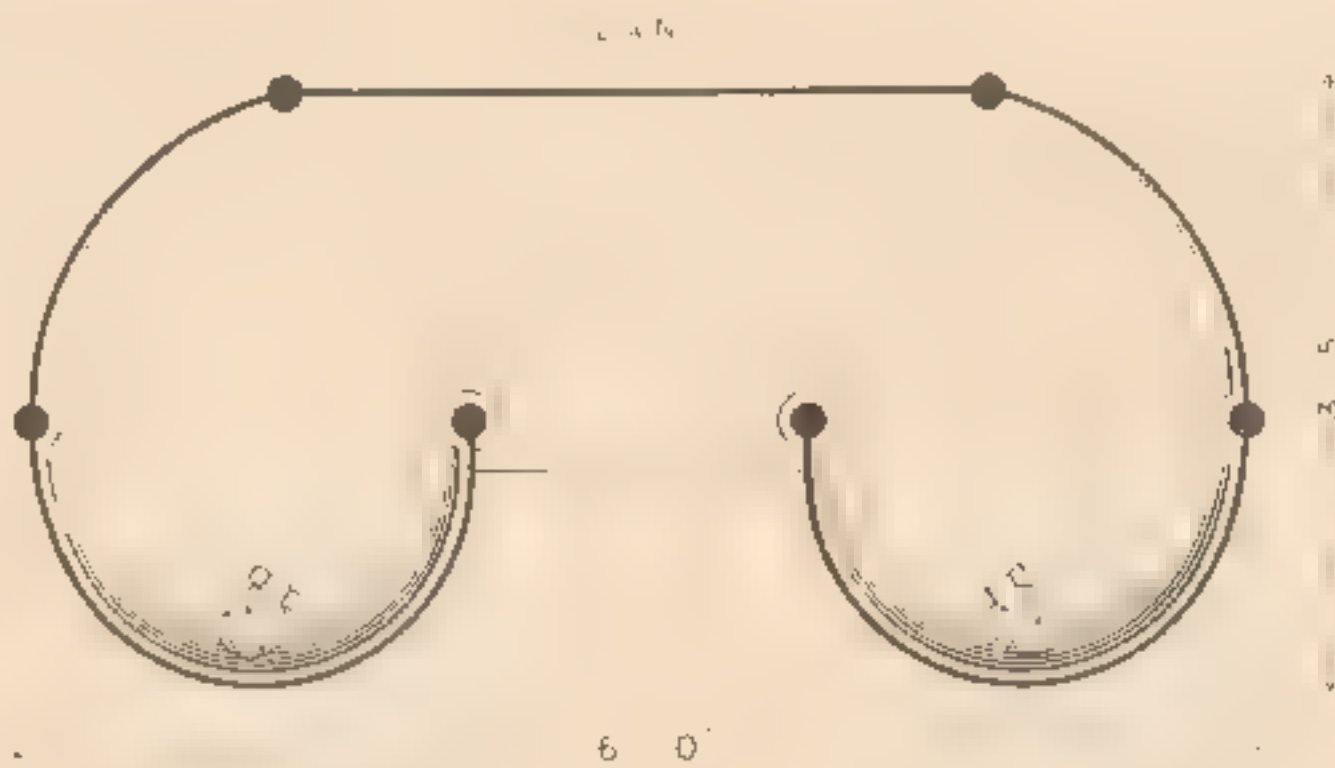
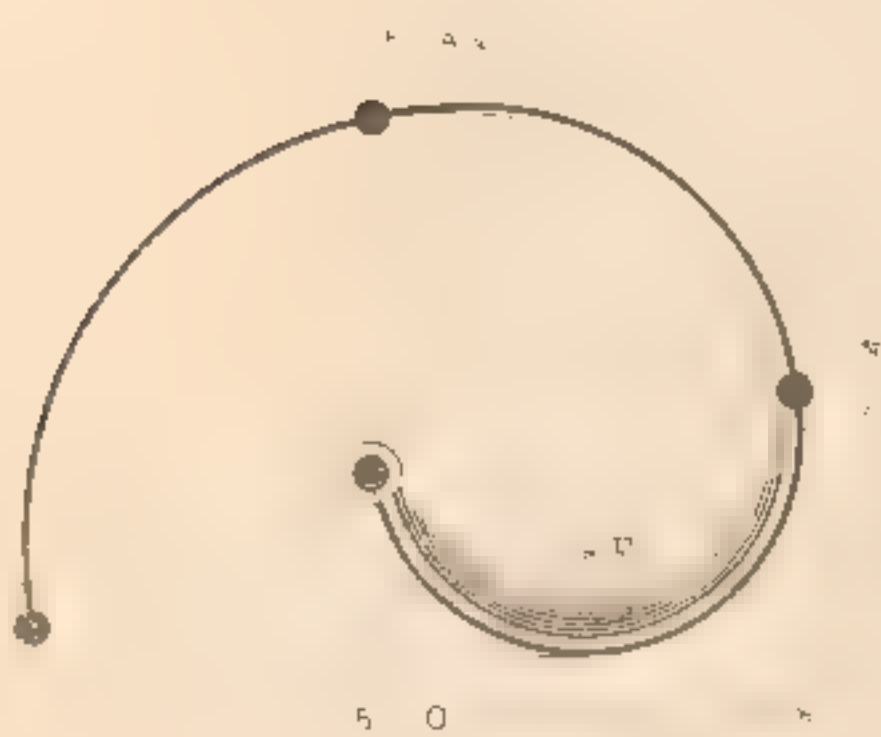
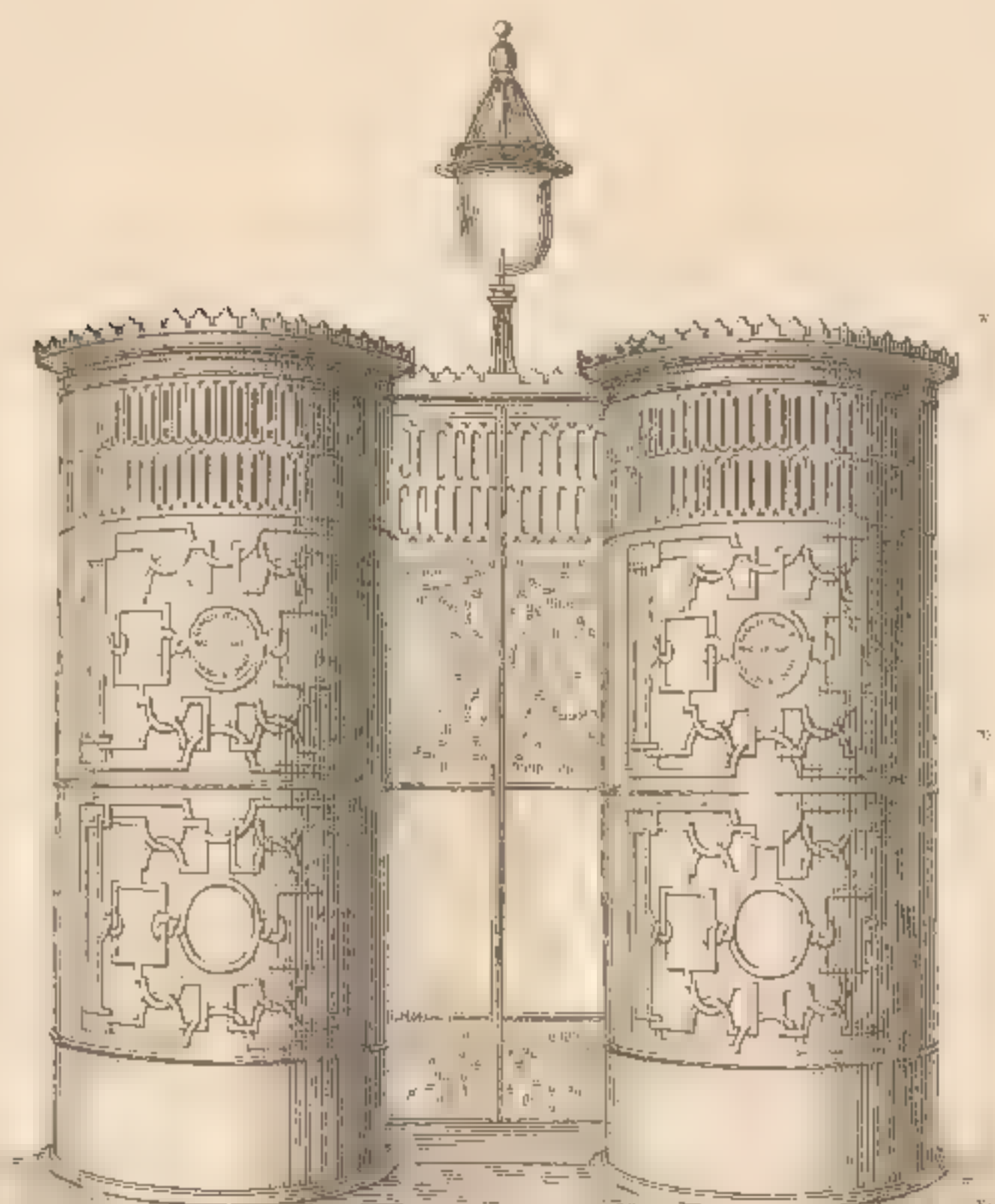
2 8'

FRONT ELEVATION



is of the same construction as No. 4, but it has the additional advantage of being entirely inclosed within walls. When for a small number of persons, it has only one entrance; but when for any greater number, it has two entrances, as here shown.

MACFARLANE'S PATENT URINALS

No 3 FOR ONE PERSON
ELEVATIONNo 3 FOR TWO PERSONS
ELEVATION

No. 3 Urinals consist of ornamental cast-iron walls wholly surrounding the person inside, and resting on sole plate, attached to which is a syphon trap connecting with the sewers.

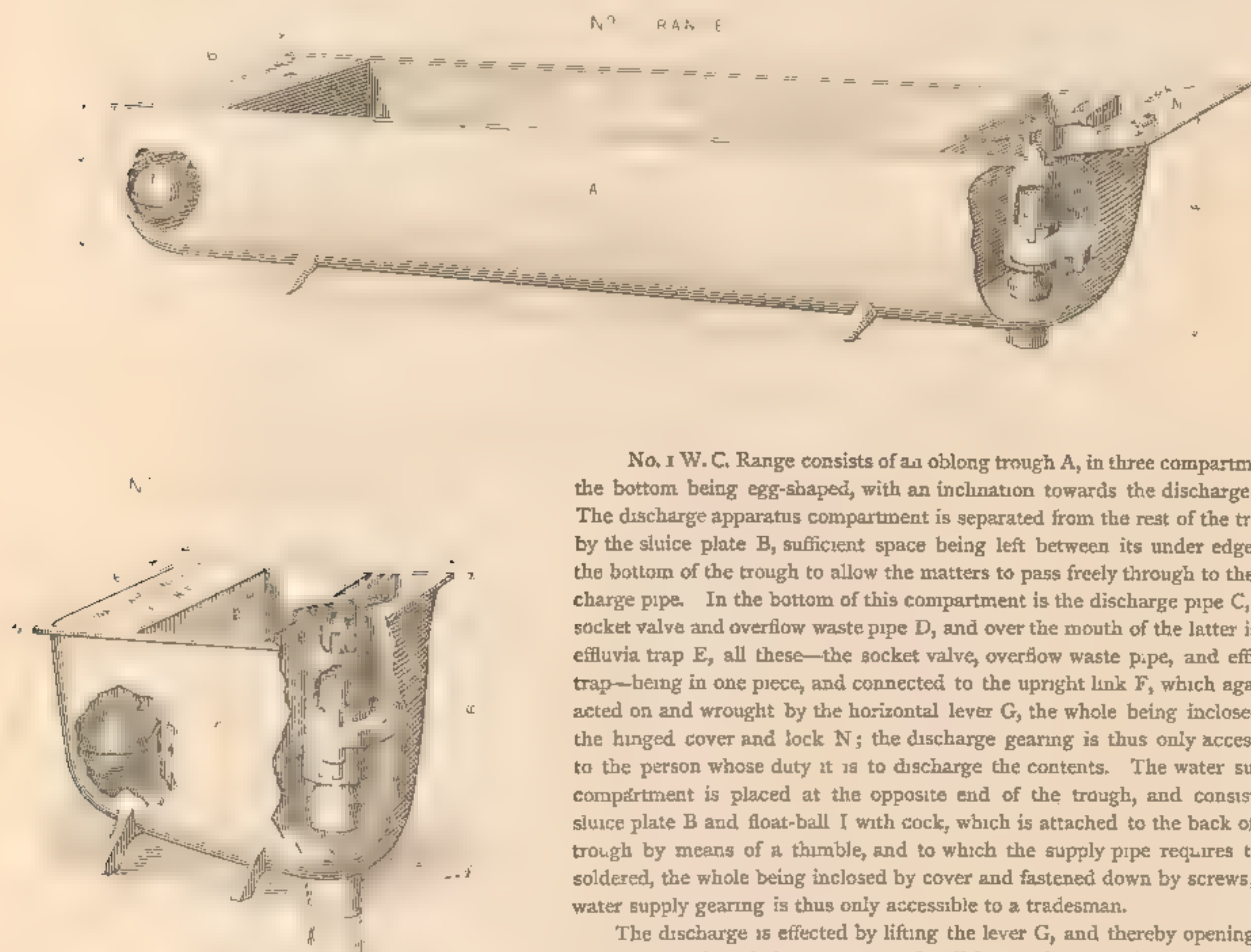
SECTION XIV. WATER CLOSETS.

MACFARLANES WATER CLOSETS

Since we first introduced our public Water Closets, the excellence of their construction has been evinced by the growing favour in which they are held wherever they have been adopted. Our aim has been to provide Water Closets thoroughly suitable for public purposes, such as Schools, Railways, Public Works, Factories, Streets, and Public Institutions generally, their requirements being entirely different from those of a domestic nature.

Our Water Closets have all their gearing inclosed within the trough, and from the peculiar construction of the valve, require no syphon pipe, and cannot by any possibility be choked or flooded. They need no cistern or water pressure, are as efficient with an intermitting as with a constant supply of water, and require less than any closet in use. The persons using our Closets have nothing whatever to do with their arrangements, as no action of the working parts takes place except once in the twenty four hours, *when the person whose duty it is discharges their contents.* They can be fitted into any common privy or closet already in use, and can be made to accommodate any number of persons in one range; they can also be partitioned into any number of separate compartments; one range can thus be made suitable for both males and females, whilst a portion of the same range may be kept separate for the counting-house employés or superintendents; in like manner, in the case of schools, &c., the same range may be divided to accommodate boys and girls, having separate compartments for male and female teachers. By this means a multiplicity of apparatus is avoided, whilst at the same time as complete privacy is provided as if each compartment were a separate Water Closet. As a general rule for establishments requiring Water Closet accommodation, one seat should be allowed for every thirty or forty persons, according to circumstances; and two feet wide is the space allowed for each person in all our Water Closets, unless specified to the contrary.

We would call special attention to the mistake often made of using stone, brick, and wood, in the construction of the walls, roofs, &c., of public Water Closets. All these materials being porous in their nature, become in time loaded with effluvia, and what little light is admitted comes through panes of glass, whilst the ventilation is generally of the rudest and most imperfect description, consequently, a nauseous effluvia is too often felt on entering them; this may be entirely prevented by introducing the direct rays of light and ventilation. It cannot be too well known that effluvia of this kind have no tendency to ascend, but are inclined to hang where generated, and hence the necessity of creating a current to absorb and carry them off. The great advantages of our Water Closets, with cast iron walls and roof, are manifest—the imperishable nature of the material, and its imperviousness to filth and gases, combined with the manner of lighting and ventilating them by means of minute perforations in the walls, rendering them marvels of sanitary construction.



No. 1 W. C. Range consists of an oblong trough A, in three compartments, the bottom being egg-shaped, with an inclination towards the discharge end. The discharge apparatus compartment is separated from the rest of the trough by the sluice plate B, sufficient space being left between its under edge and the bottom of the trough to allow the matters to pass freely through to the discharge pipe. In the bottom of this compartment is the discharge pipe C, with socket valve and overflow waste pipe D, and over the mouth of the latter is the effluvia trap E, all these—the socket valve, overflow waste pipe, and effluvia trap—being in one piece, and connected to the upright link F, which again is acted on and wrought by the horizontal lever G, the whole being inclosed by the hinged cover and lock N; the discharge gearing is thus only accessible to the person whose duty it is to discharge the contents. The water supply compartment is placed at the opposite end of the trough, and consists of sluice plate B and float-ball I with cock, which is attached to the back of the trough by means of a thimble, and to which the supply pipe requires to be soldered, the whole being inclosed by cover and fastened down by screws; the water supply gearing is thus only accessible to a tradesman.

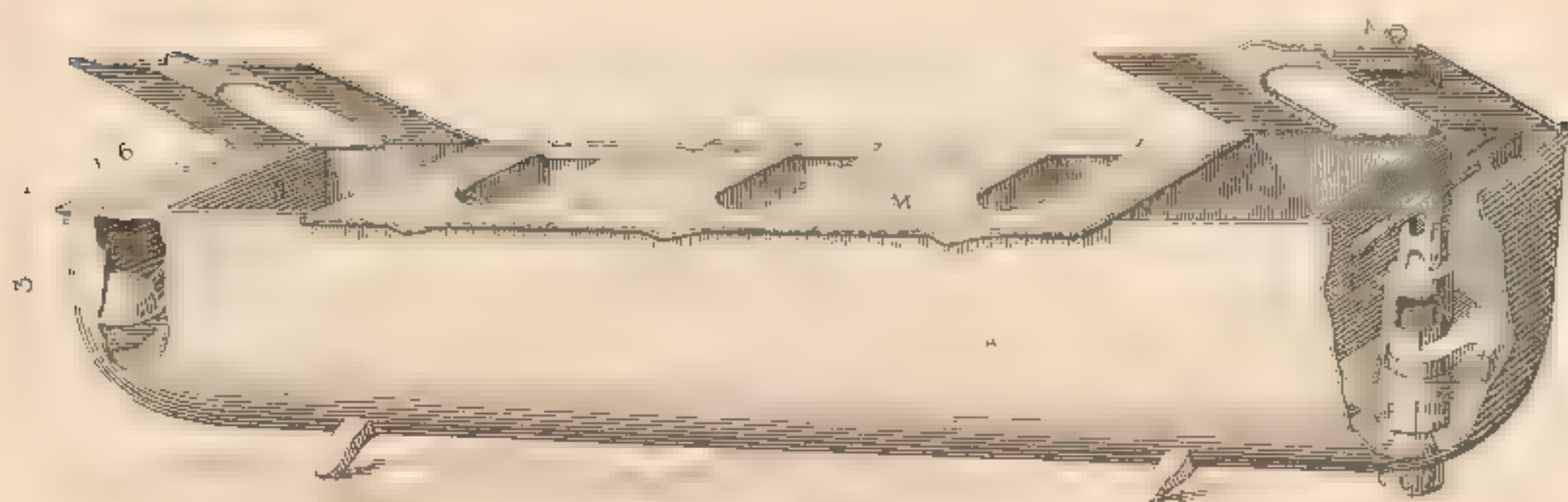
The discharge is effected by lifting the lever G, and thereby opening the valve, when the whole contents rush off free and unimpeded to the sewer; then, letting go the lever, the valve drops into its socket, and the trough refills of its own accord to the proper height. The operation only requires to be done once every day, and is the work of a few seconds.

No. 1 W. C. for one person is in every respect the same as No. 1 Range, but has no cover nor lock on the discharge gearing.

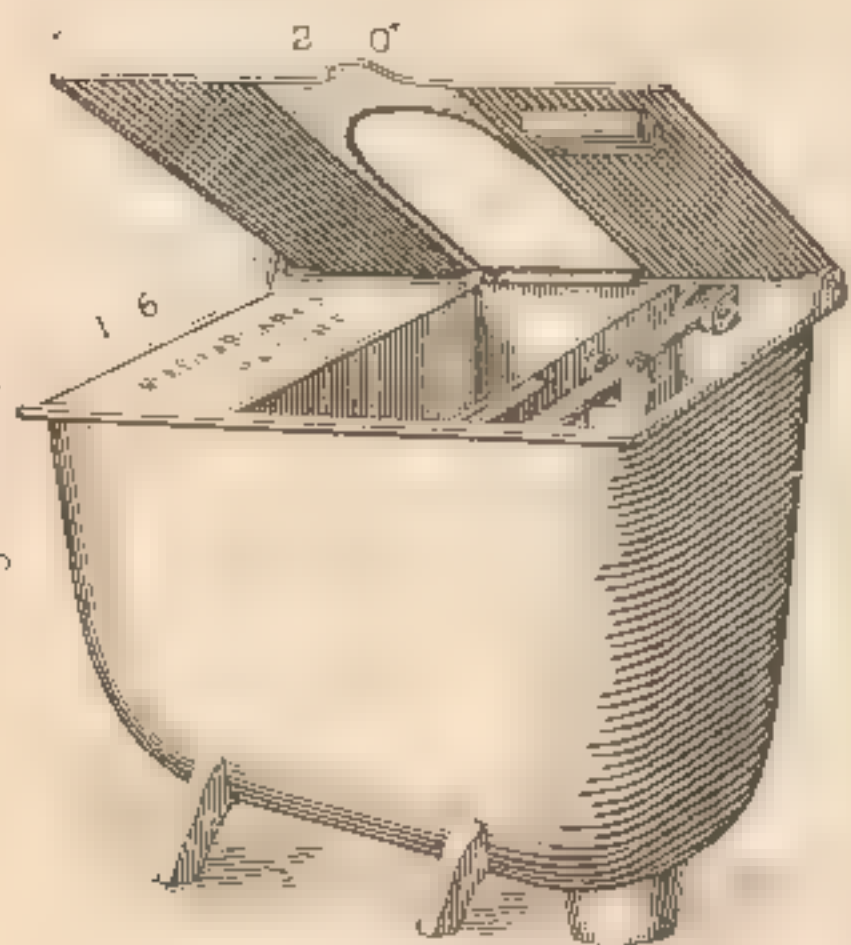
No. 1 is in its constructive parts, and all that relates to the W. C. proper, the same as our more expensive kinds, the difference in price arising entirely from the absence of seats, divisions, or other external attachments; these may be added to the closet of any form or material that may under the circumstances be considered most suitable for its intended situation.

MACFARLANE'S PATENT WATER CLOSETS

No 2 RANGE



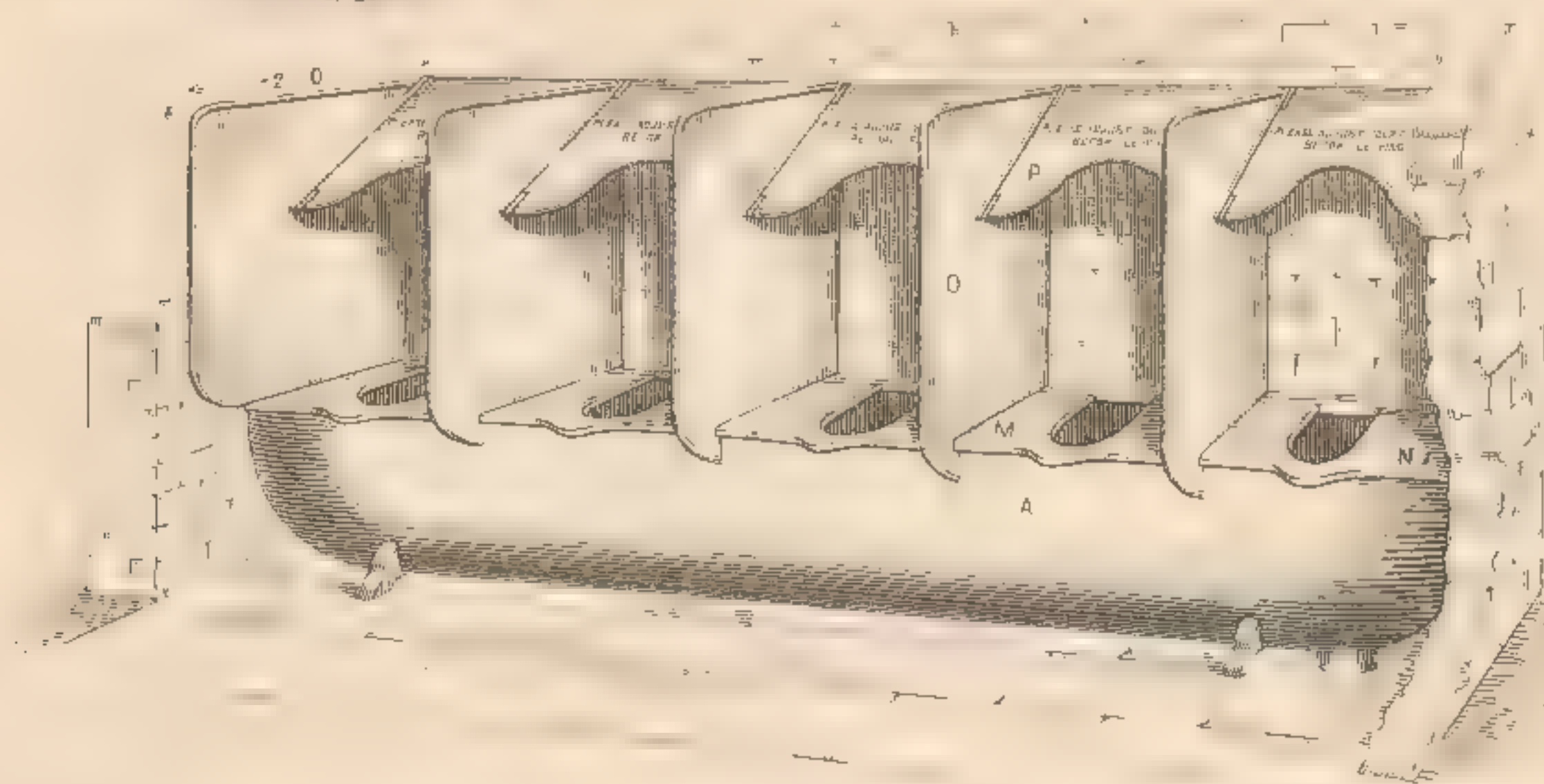
No 2 FOR ONE PERSON



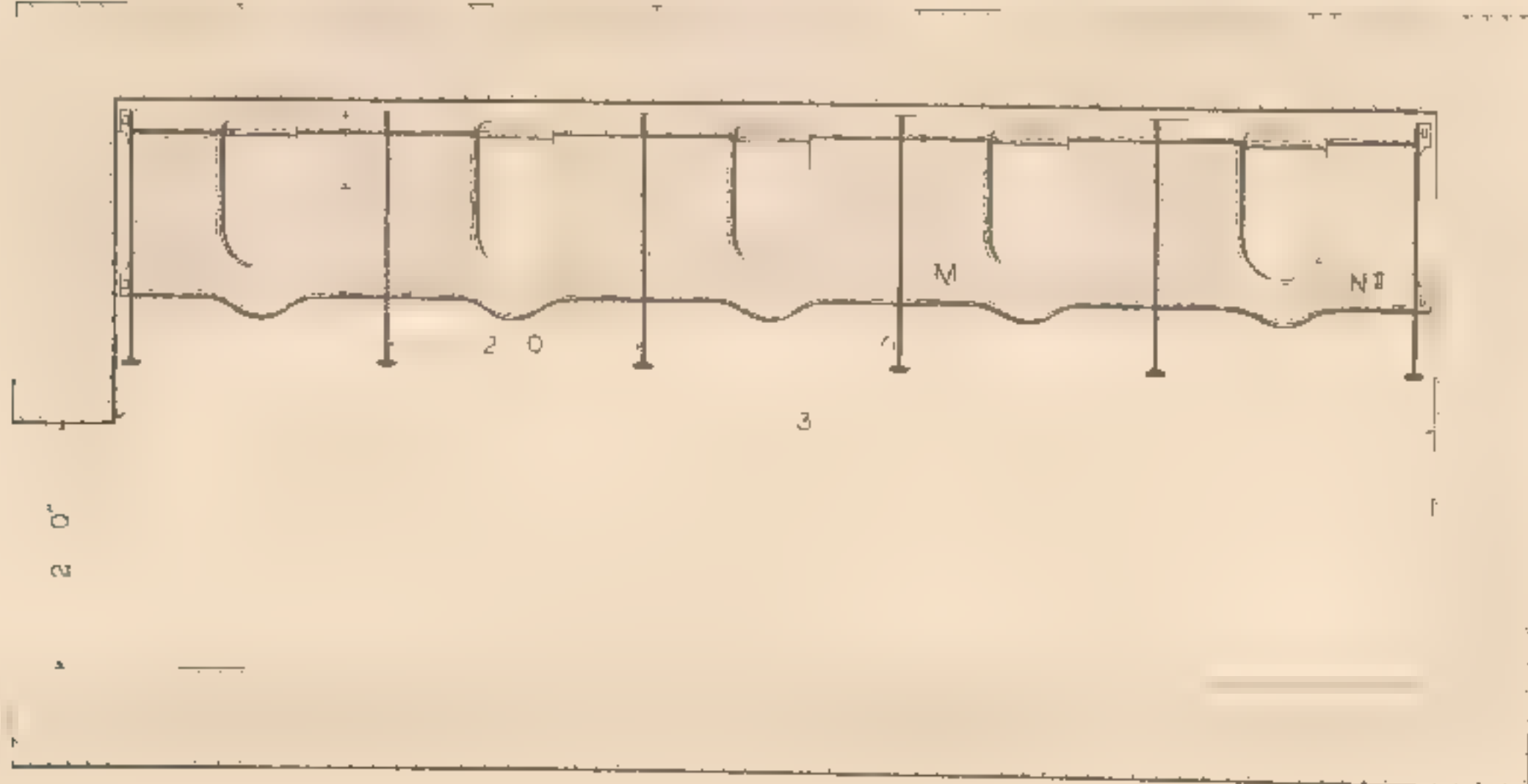
No. 2 W. C. RANGE is, in every respect, the same as No. 1, but with the addition of hinged seats M, consisting of iron plates covered with wood, and having an oblong space in the centre, terminating at the back with an iron cope; thus giving a more open passage for the soil, and a degree of cleanliness not attainable by the usual oval opening. The discharge gearing is inclosed by a portion of the end seat, to which is attached a lock N. A space of one inch is left between the seats, so that partitions may be added of the form and material most suited for its intended situation.

No. 2 W. C. for one person is, in every respect, the same as No. 2 Range.

No 4 RANGE



PLAN

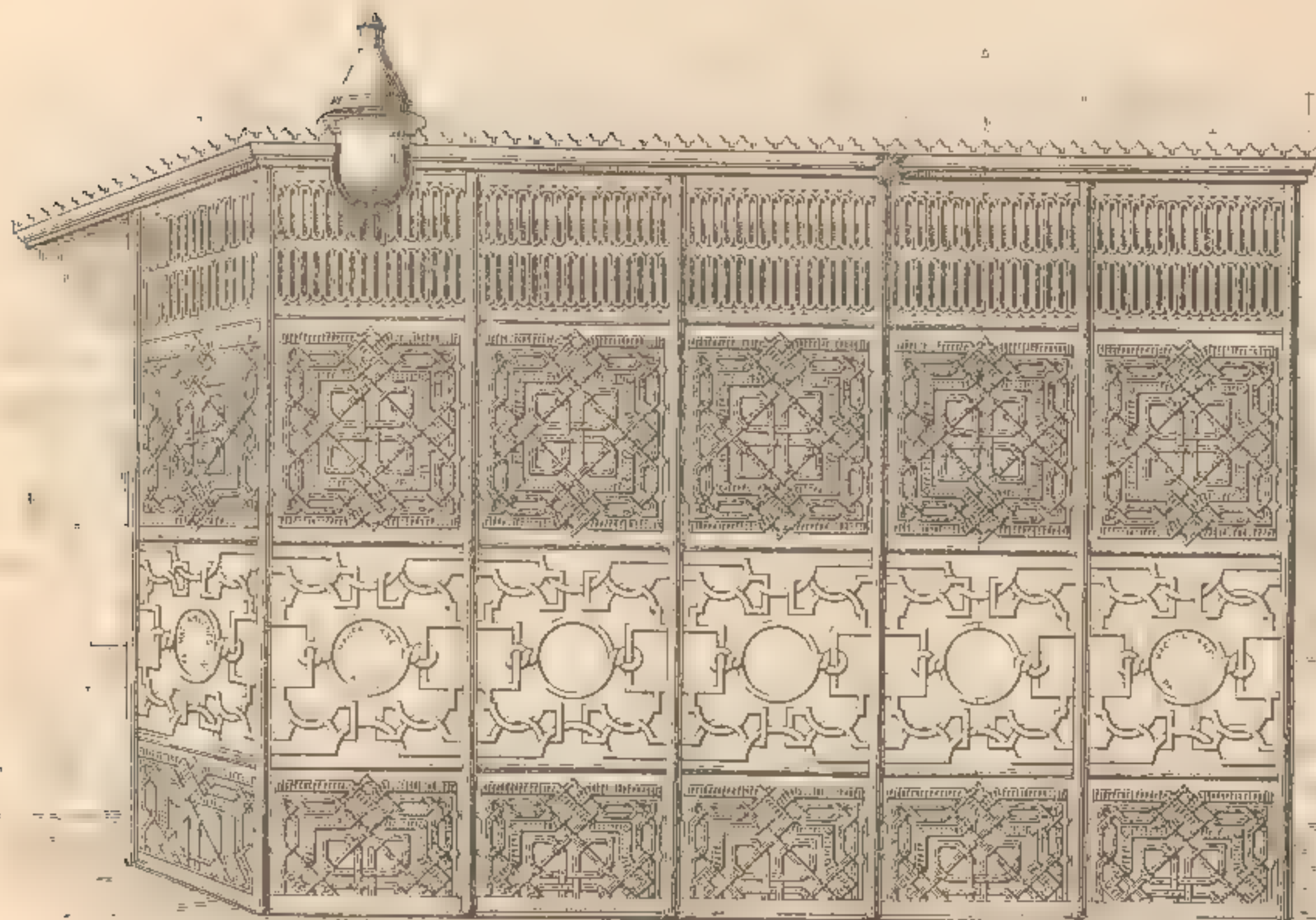


No. 4 W. C. RANGE is, in every respect, the same as No. 2, but each seat is separated by an iron partition O, and back guard plate P. The partition O gives privacy and comfort, whilst the back guard plate P prevents any person from standing on the seats.

Our Nos. 1, 2, and 4 Water Closets are intended to be fitted up in brick, stone, or wooden buildings. The above illustrations show the general arrangement, but we can alter them to meet the requirements of any case.

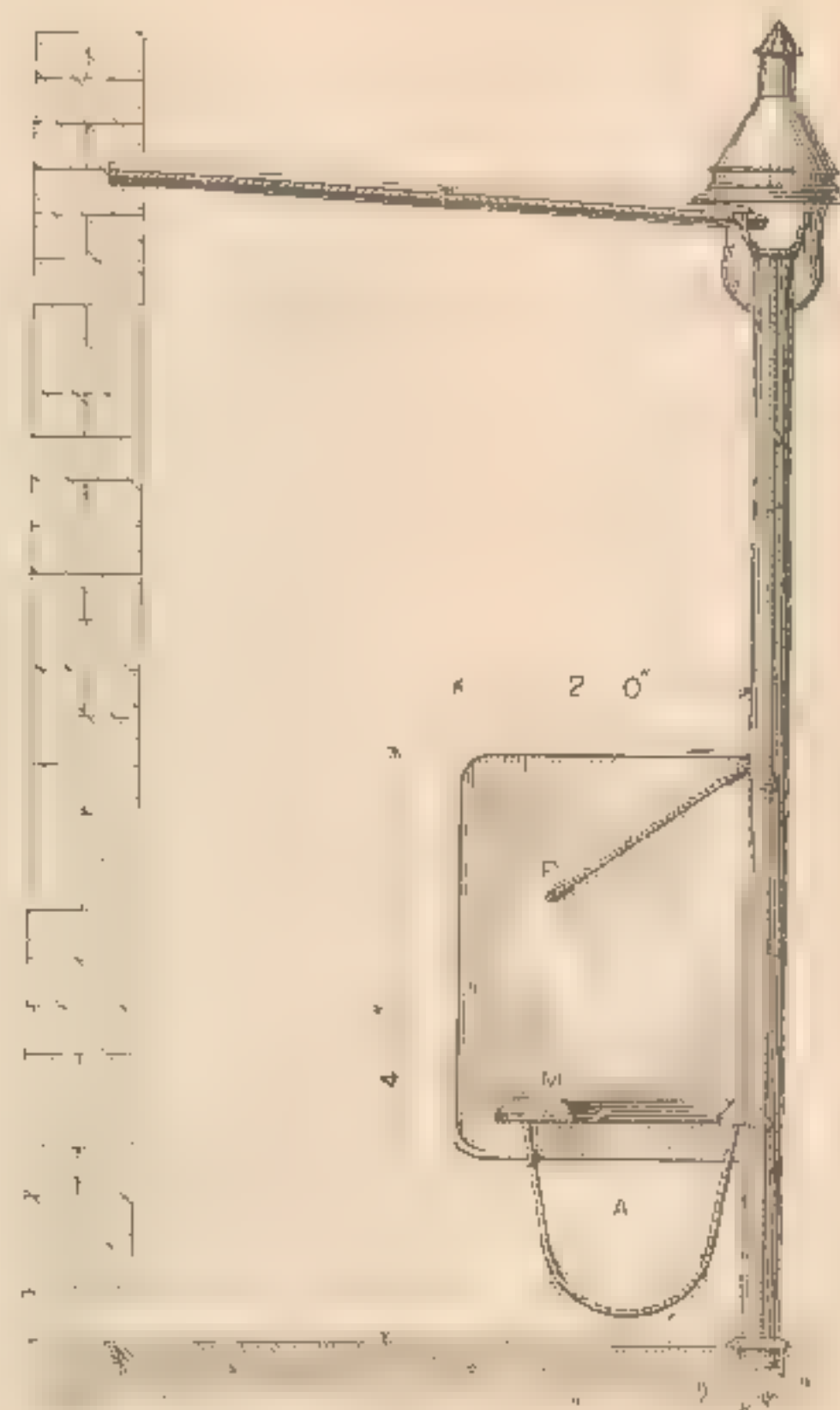
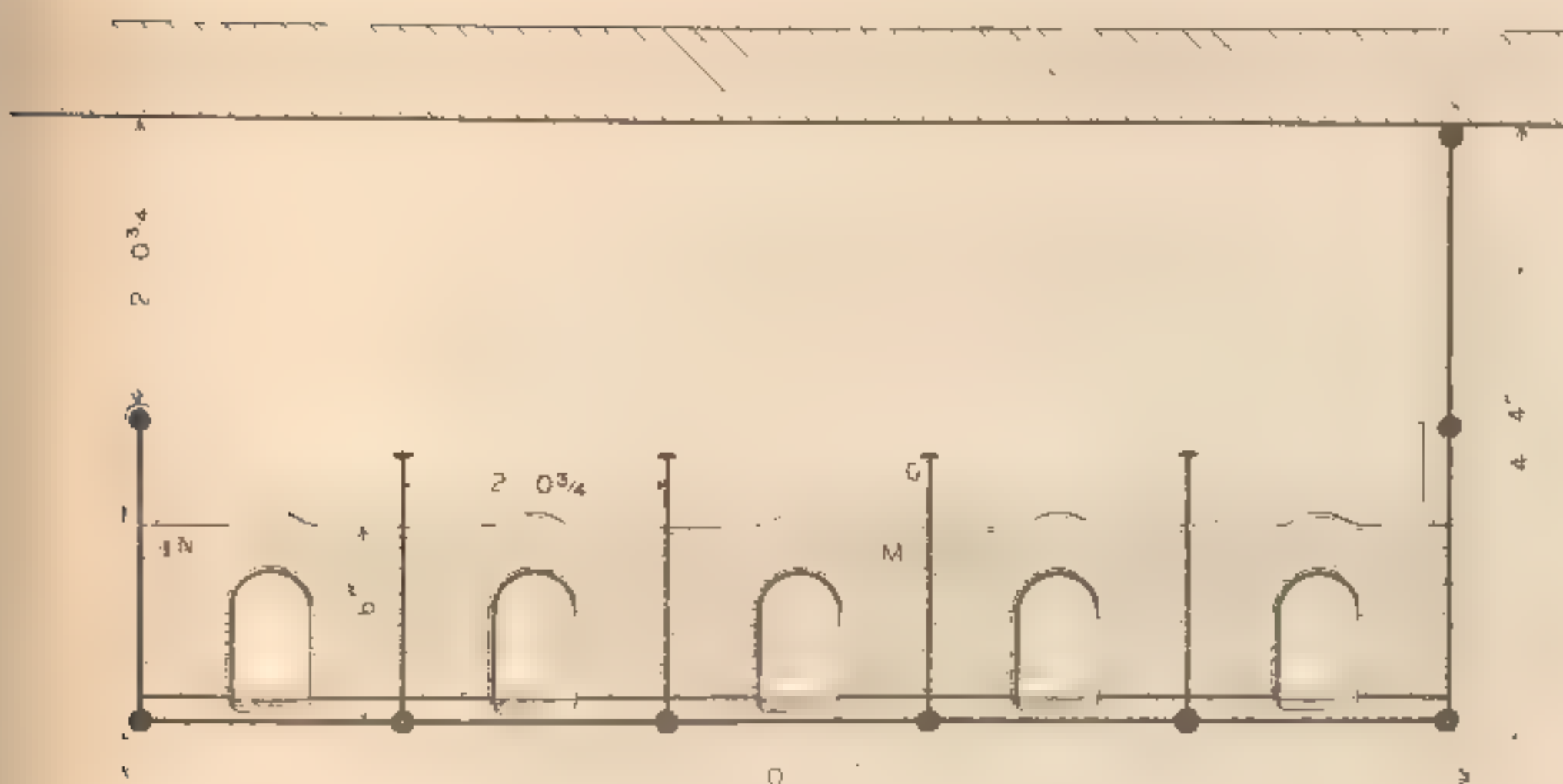
MACFARLANE'S PATENT WATER CLOSETS

NO 3 RANGE



FL 4 B

SECTION THROUGH A B



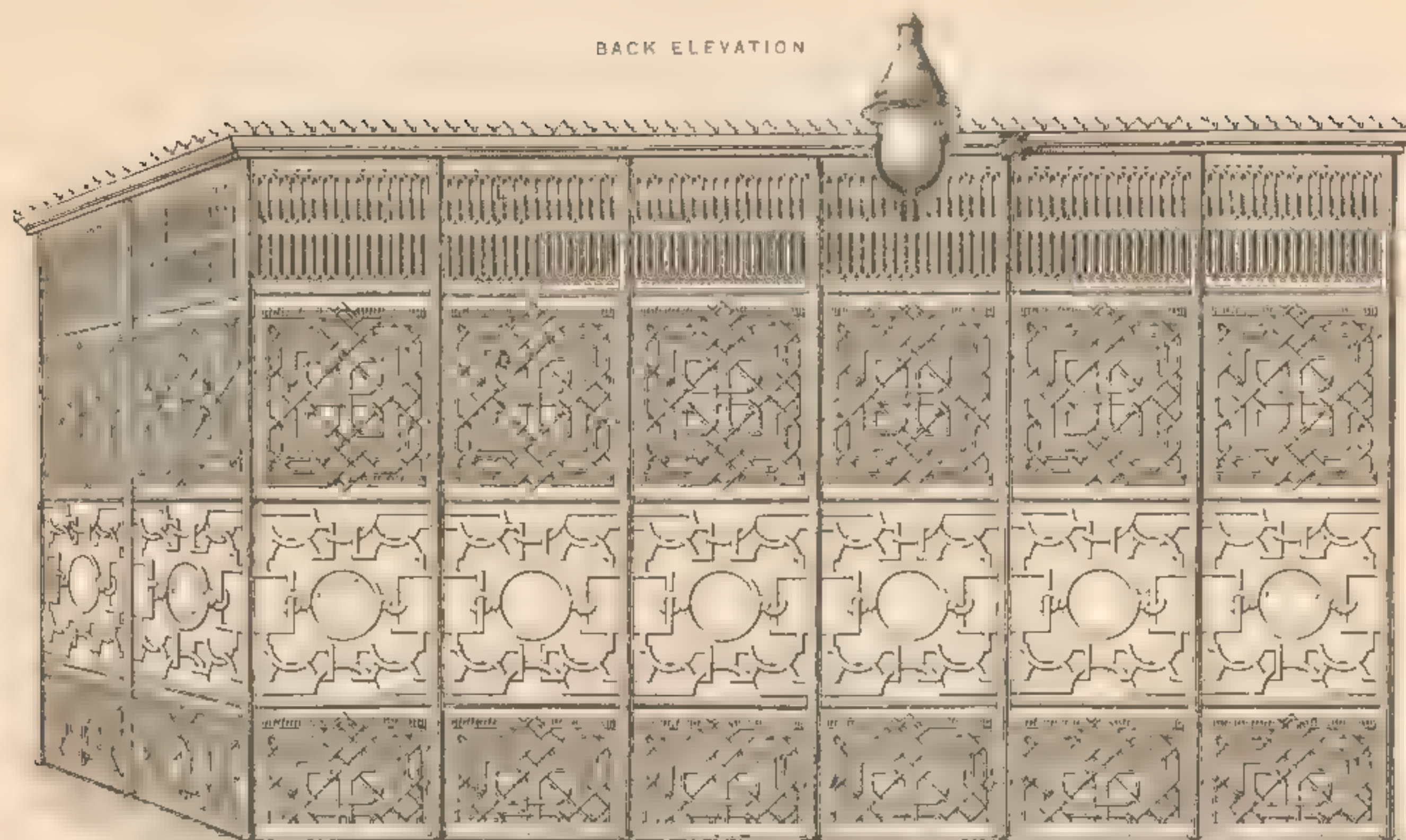
No. 3 W. C. RANGE is similar in its interior arrangements to No. 4. The front, end walls, and roof, however, are wholly composed of ornamental cast-iron plates and pillars, all dove-tailed together, the whole structure being intended to be placed against a wall. The entrance is at one end, but when more than five seats are in one Range, an entrance is at both ends. It is lighted and ventilated from the sides, by the open fret-work L, and perforated plates Q, and at night it is lighted by gas lamp. No door is required for the entrance; but in situations where necessary a screen can be placed opposite.

No. 3 W. C. RANGE has many advantages to recommend its adoption,—the material being cast-iron, is in its nature indestructible, whilst the ventilation by means of the fret-work and perforated plates produces a marvellous degree of freshness, and entire freedom from smell.

MACFARLANE'S PATENT

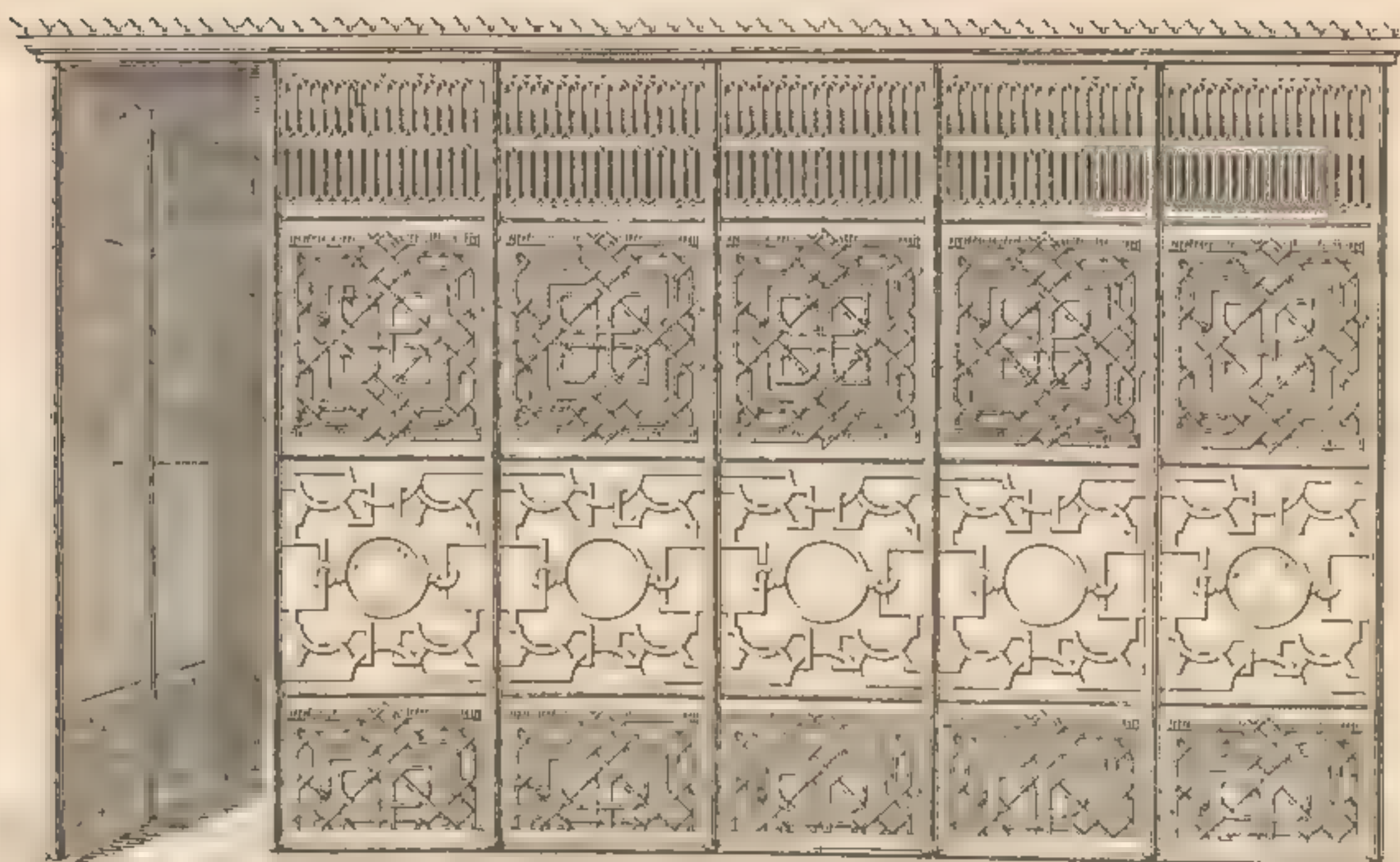
No 5 RANGE

BACK ELEVATION



8

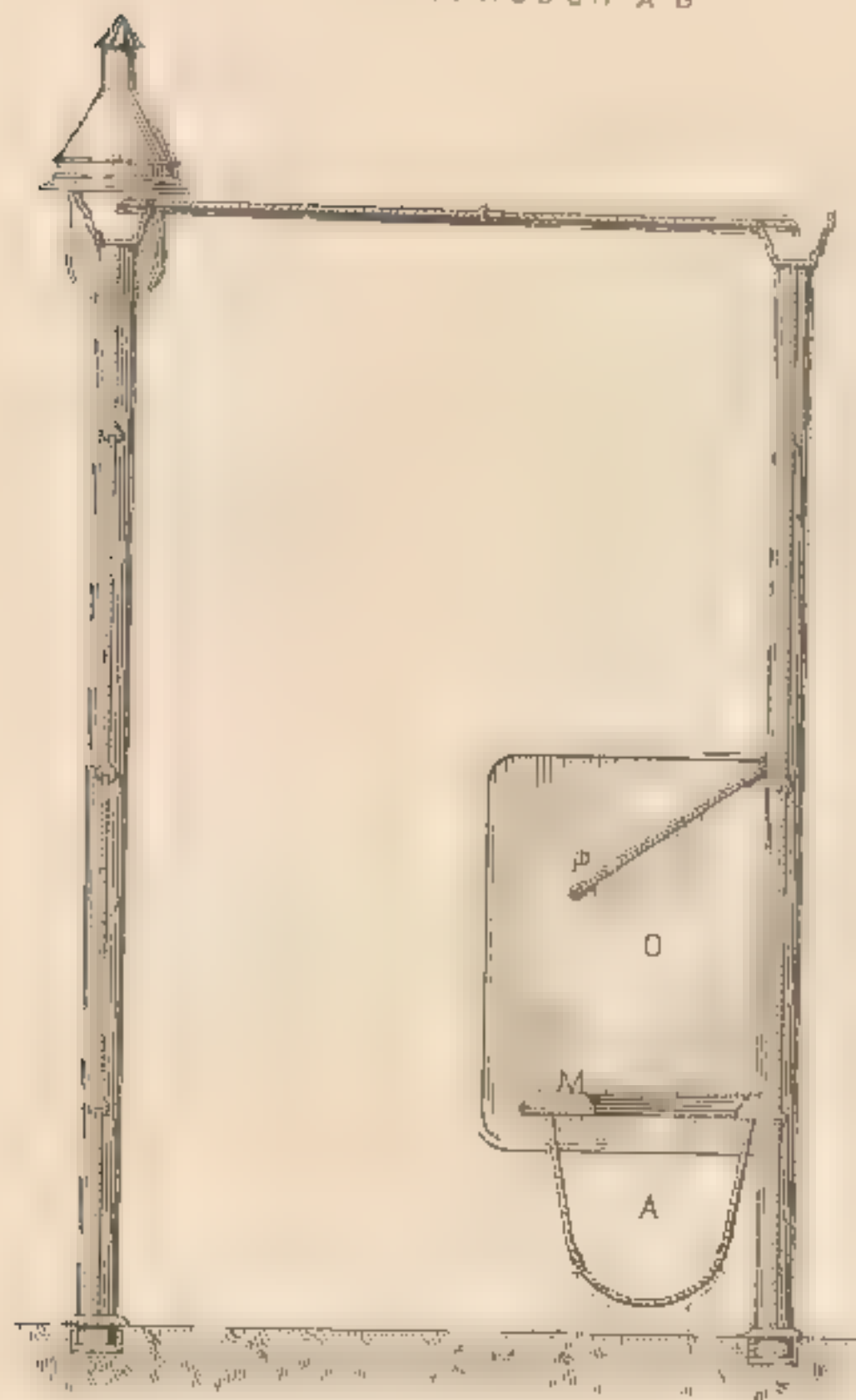
FRONT ELEVATION



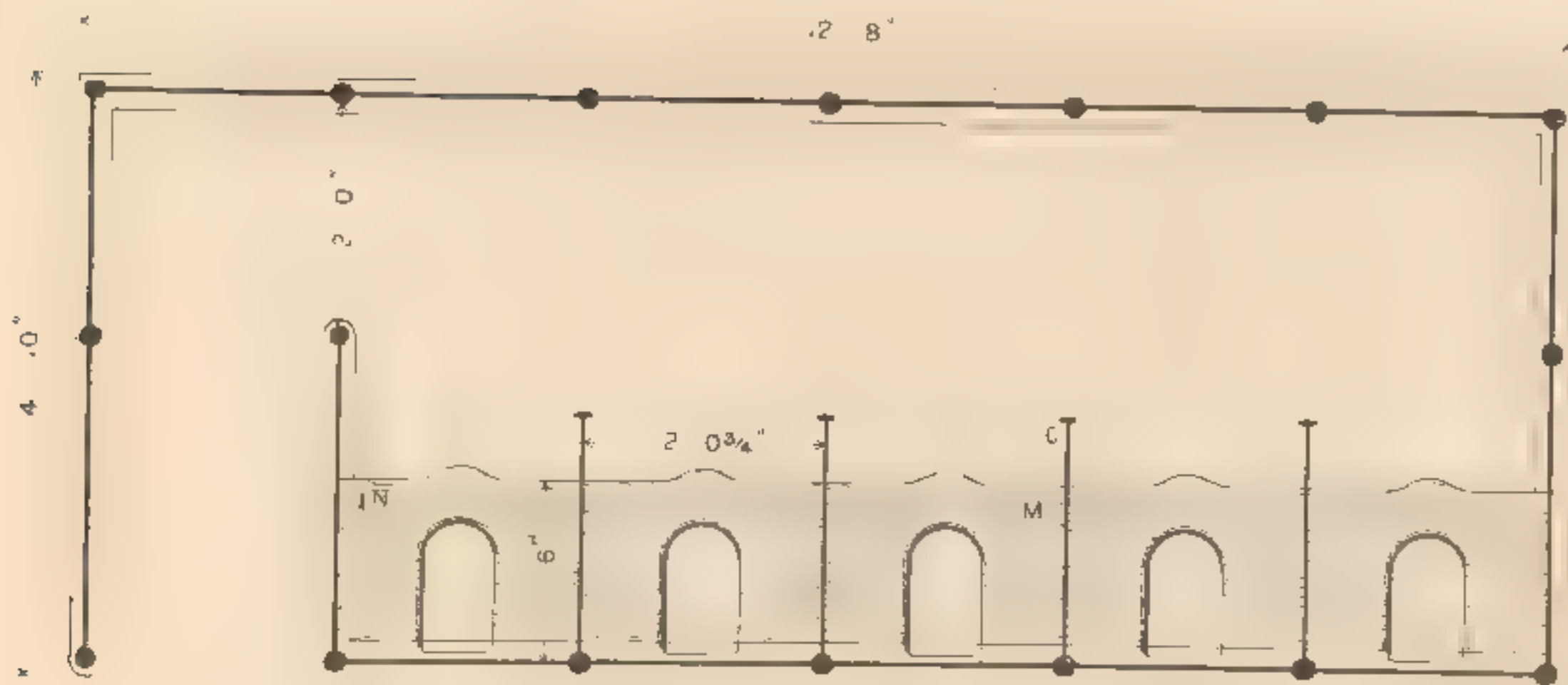
9

WATER CLOSETS

NO 5 RANGE
SECTION THROUGH A B



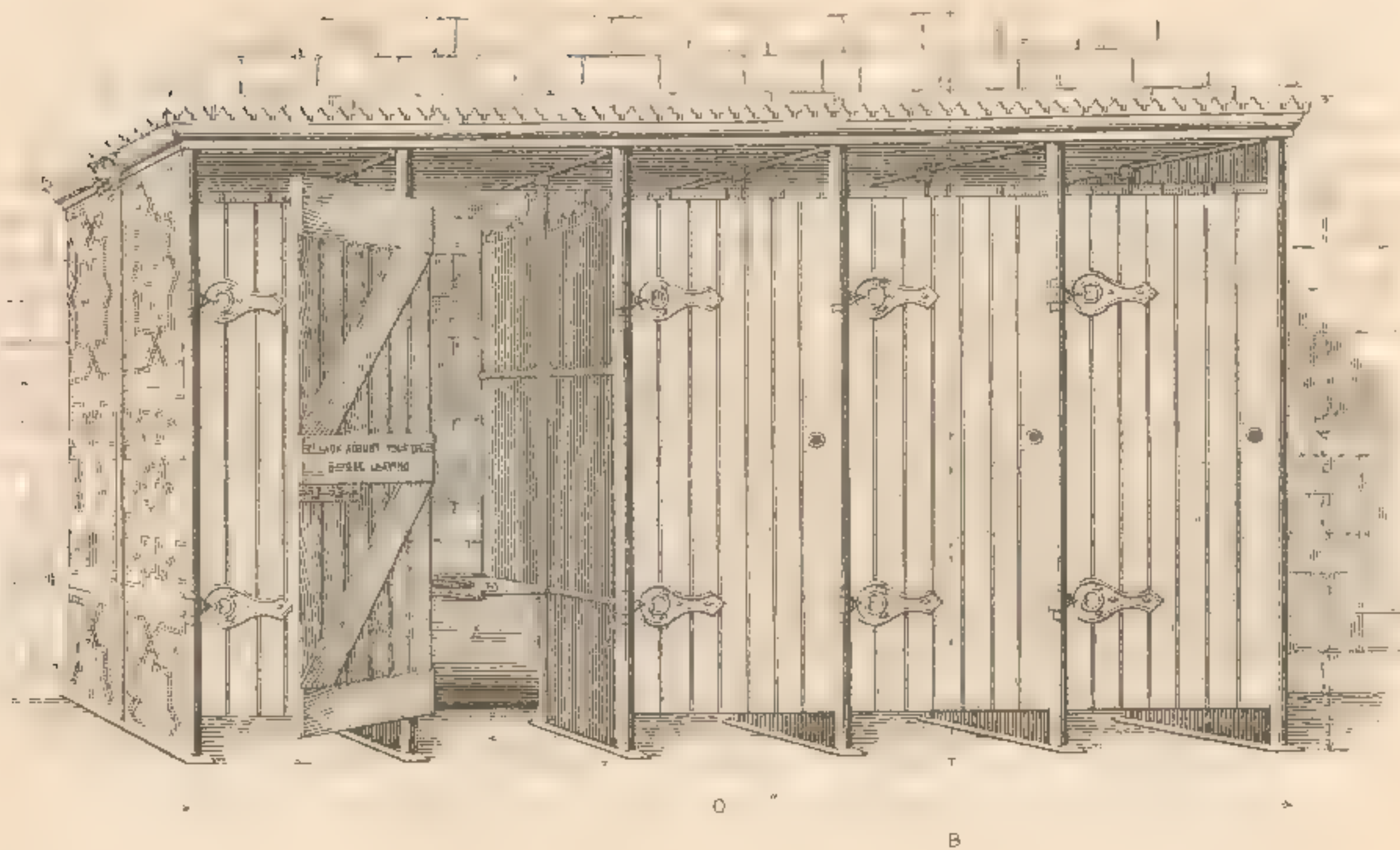
PLAN
2' 8"



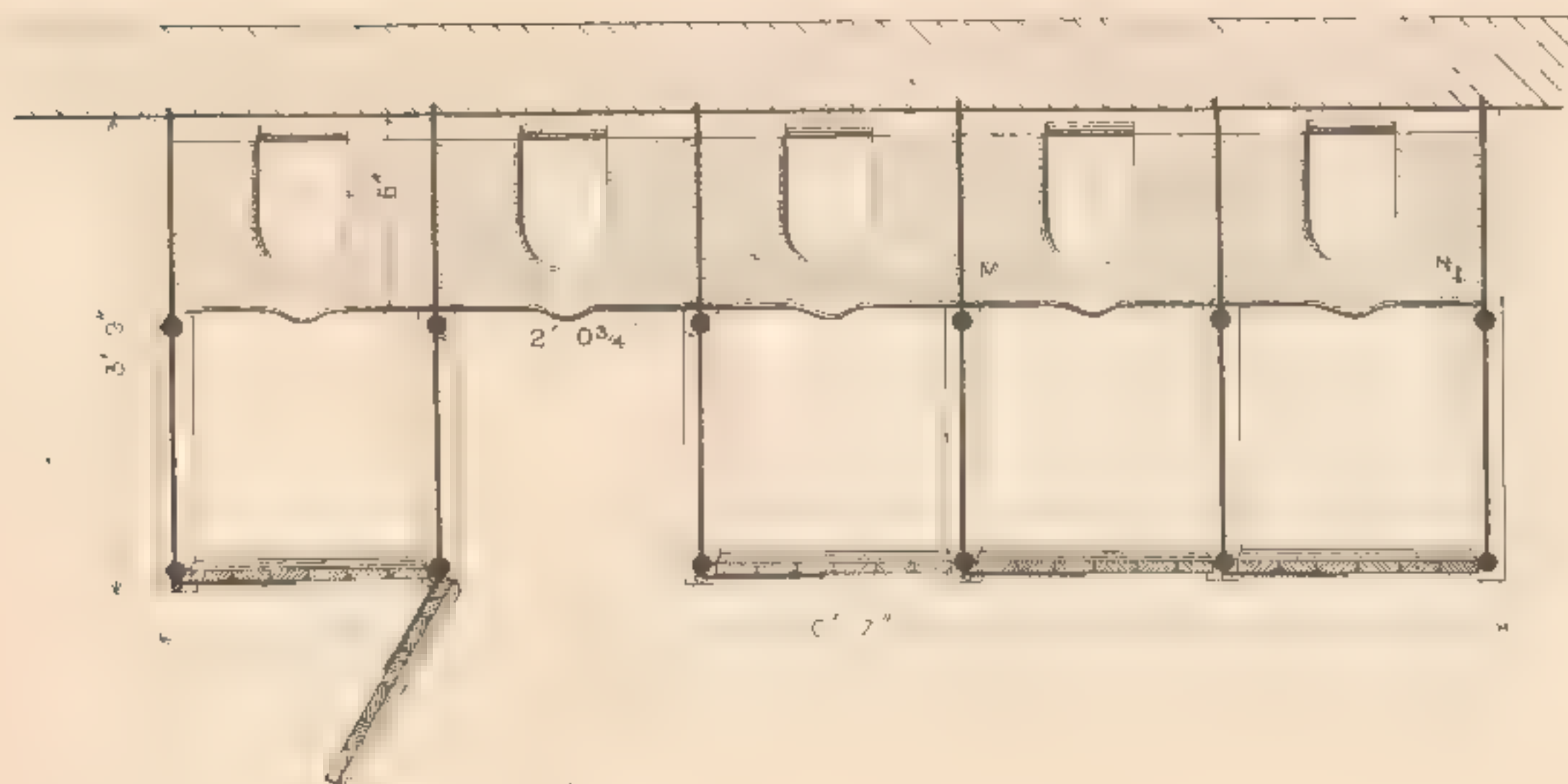
No. 5 W. C. RANGE is similar in its interior arrangements to No. 3; but instead of being fitted up against a wall, the whole structure is complete in itself, and wholly composed of cast-iron. The entrance is at one end, but when more than five seats are in one range, an entrance is at both ends. The open fret-work *L*, and perforated plates *Q*, give light and ventilation to the interior, whilst the lamp lights it at night.

No. 5 W. C. RANGE is well adapted for situations where it is desirable to be unconnected with the adjacent buildings; the chaste and unobtrusive character of the structure adapts it for any situation, without detracting from the amenity of the surrounding objects.

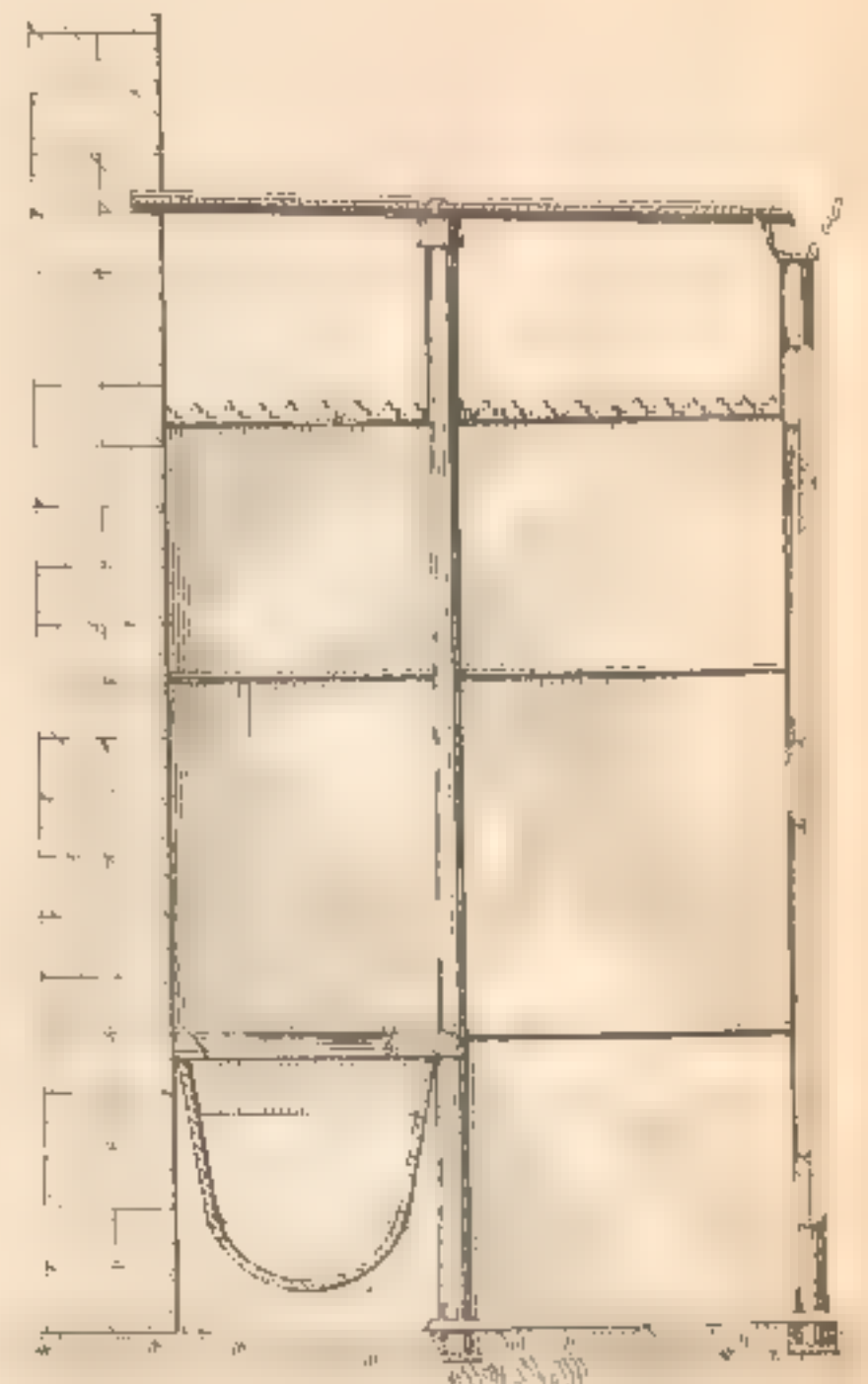
MACFARLANE'S PATENT WATER CLOSETS

NO 6 RANGE
ELEVATION

PLAN



SECTION THROUGH A B



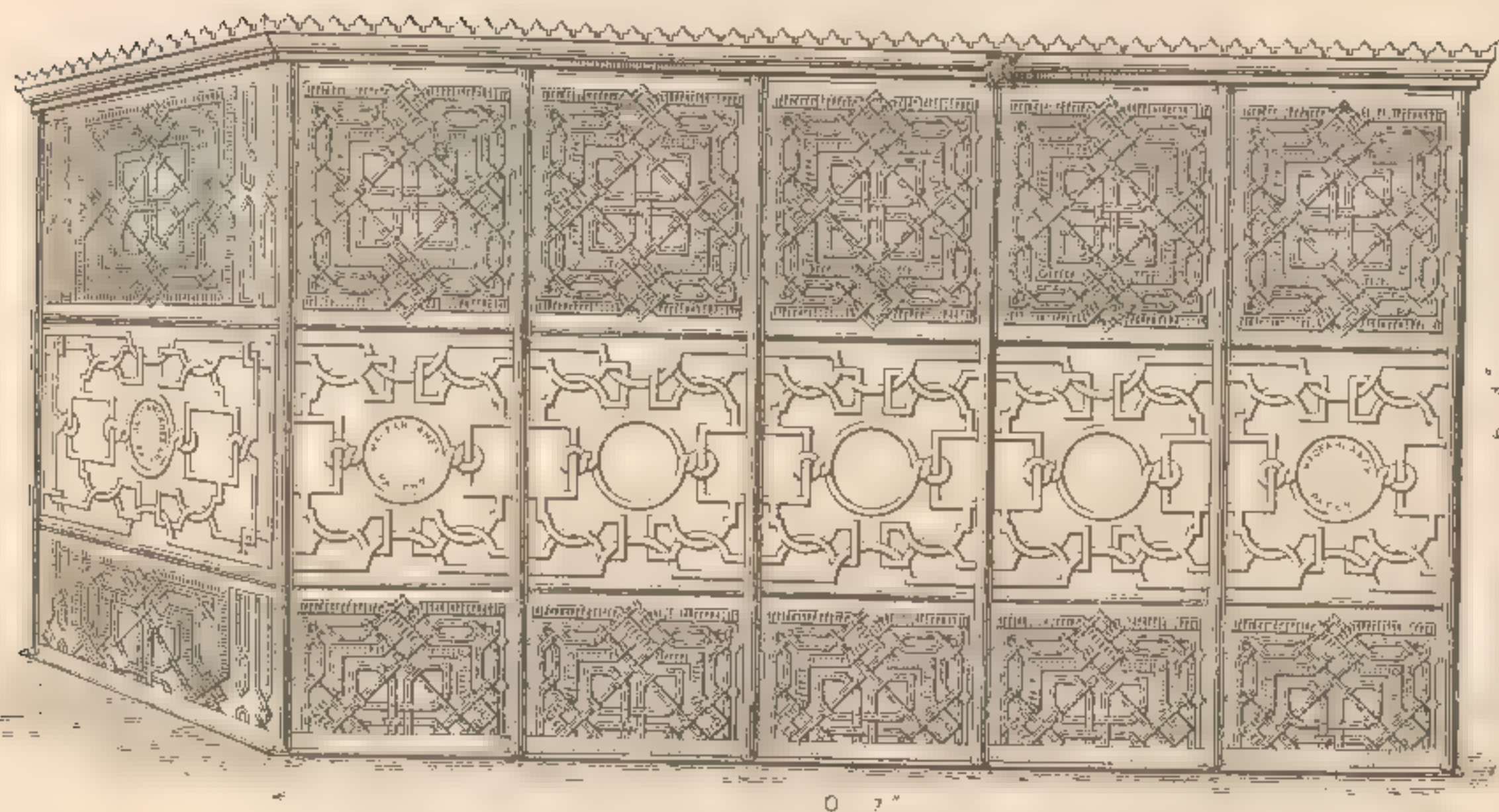
NO. 6 W. C. RANGE is divided into compartments, each having a separate door. The partition walls and roof are wholly composed of cast-iron plates and pillars, all dove-tailed together, the whole structure being intended to be placed against a wall.

NO. 6 W. C. RANGE will be found particularly suitable for Schools, &c. Its moderate price, substantiality, and the little room it occupies, are features that are worthy the consideration of public institutions.

MACFARLANE'S PATENT WATER CLOSETS.

577

NO 9 RANGE
BACK ELEVATION

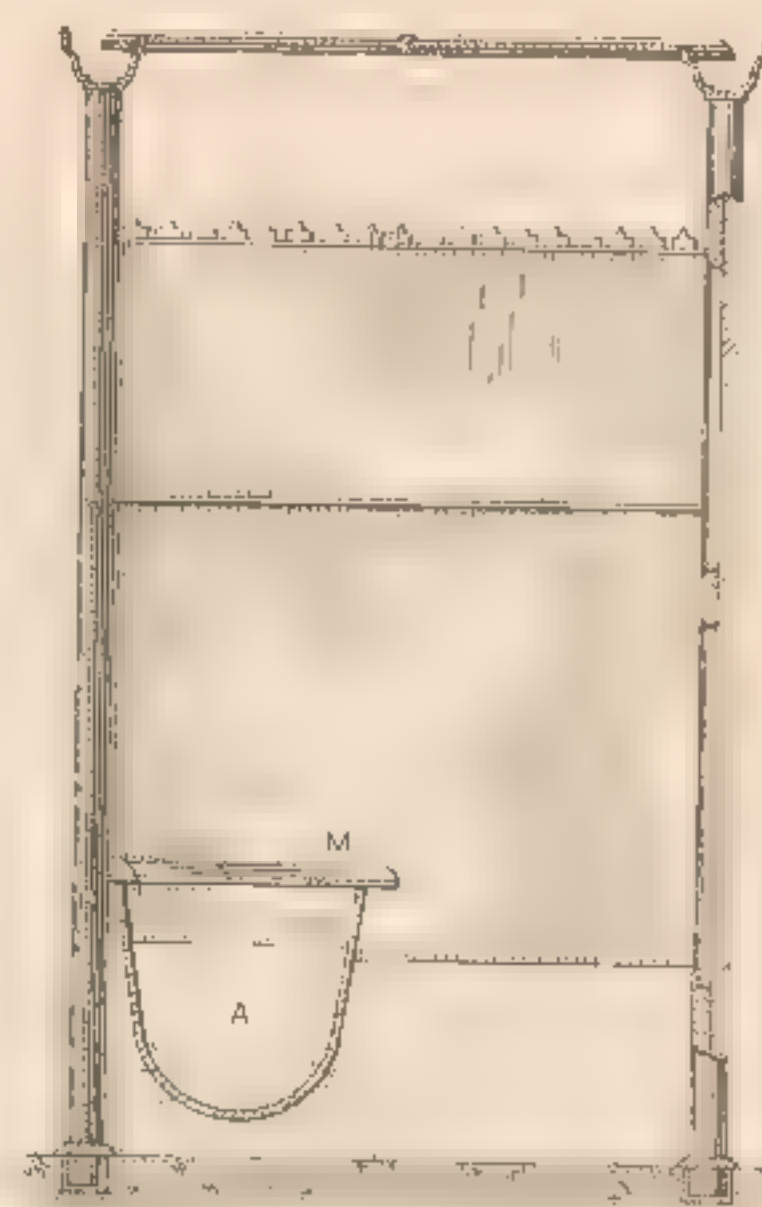


FRONT ELEVATION

A



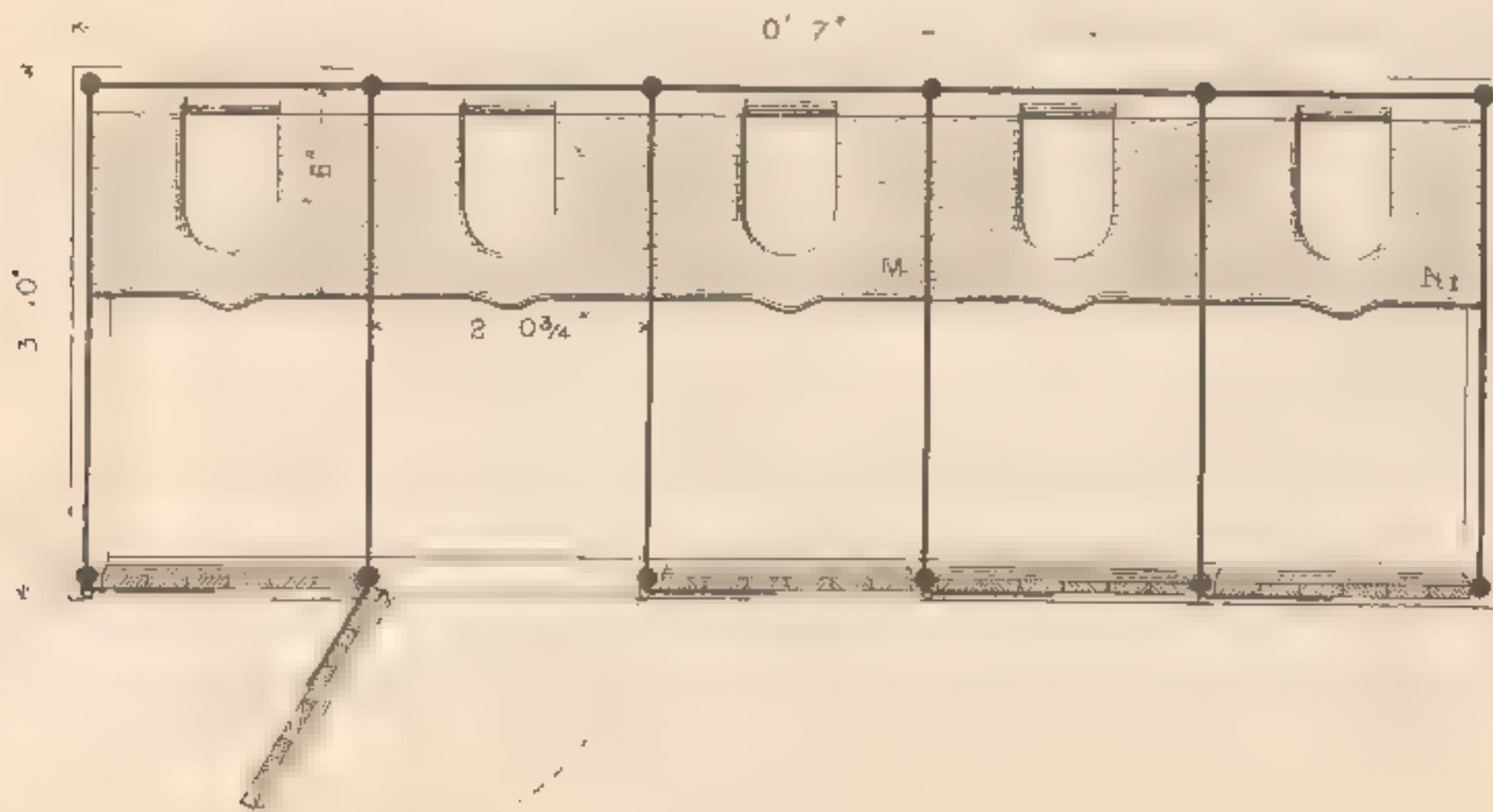
SECTION THROUGH A B



B

PLAN

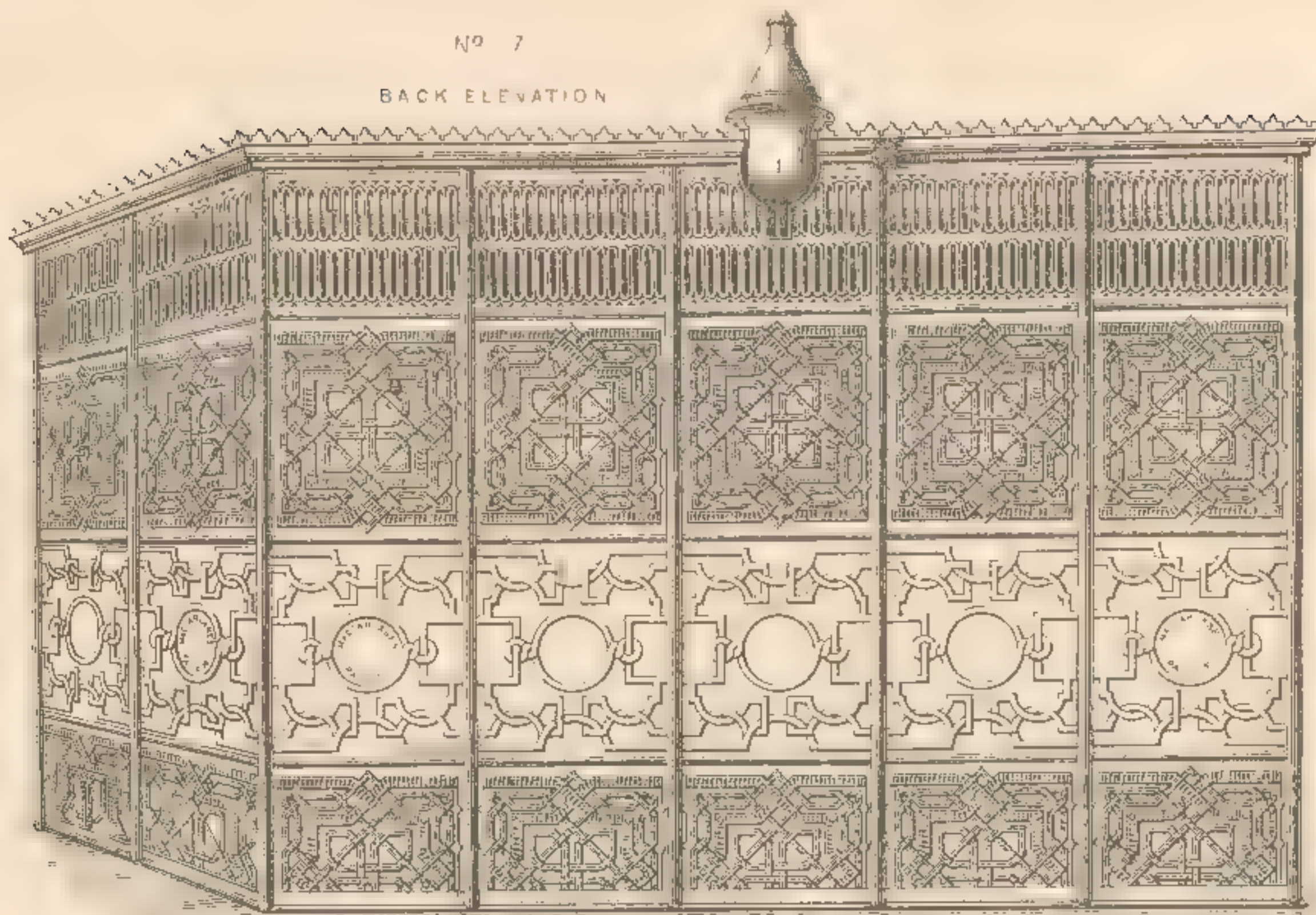
0' 7"



No. 9 W. C. RANGE is similar in its interior arrangements to No. 6; but instead of being fitted up against a wall, the structure is complete in itself, and is wholly unconnected with the adjacent buildings.

No 7

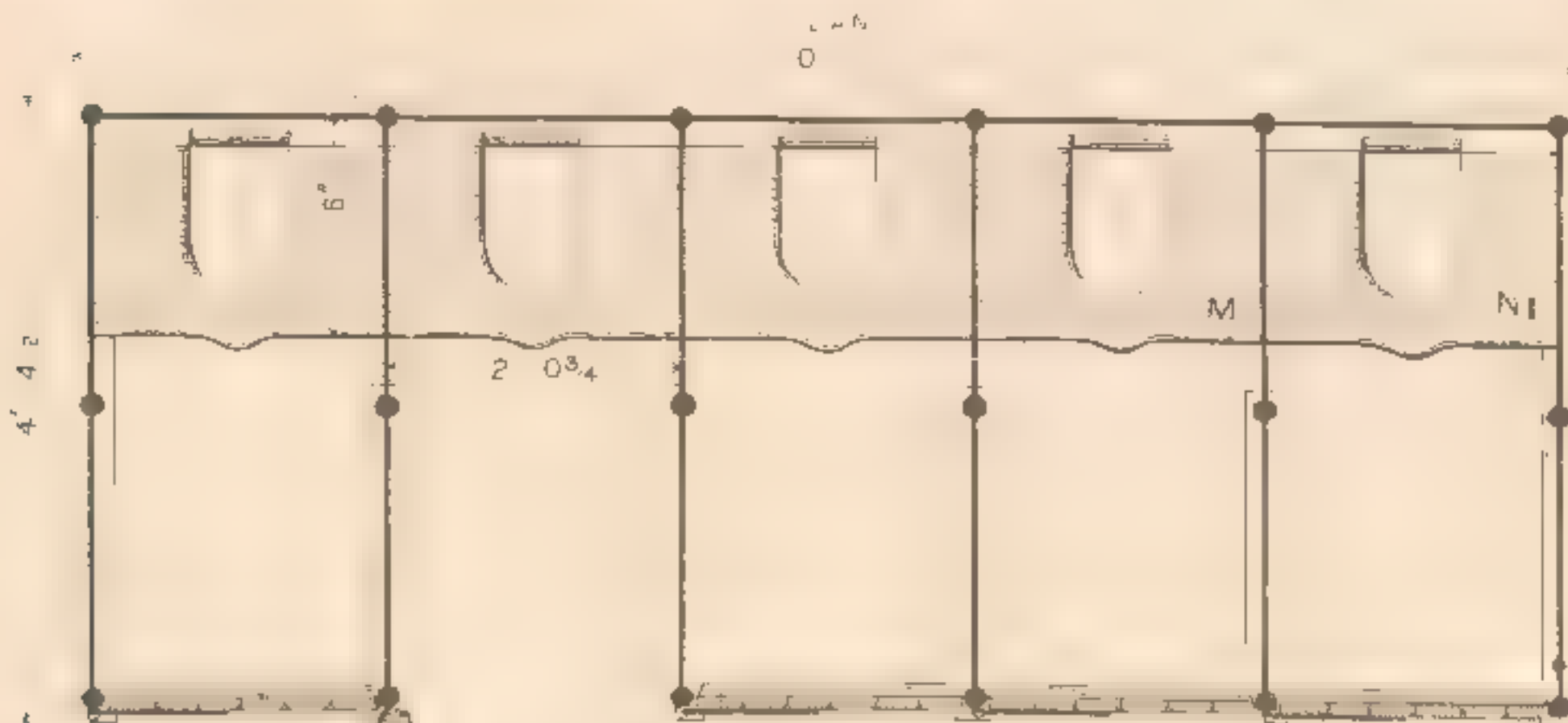
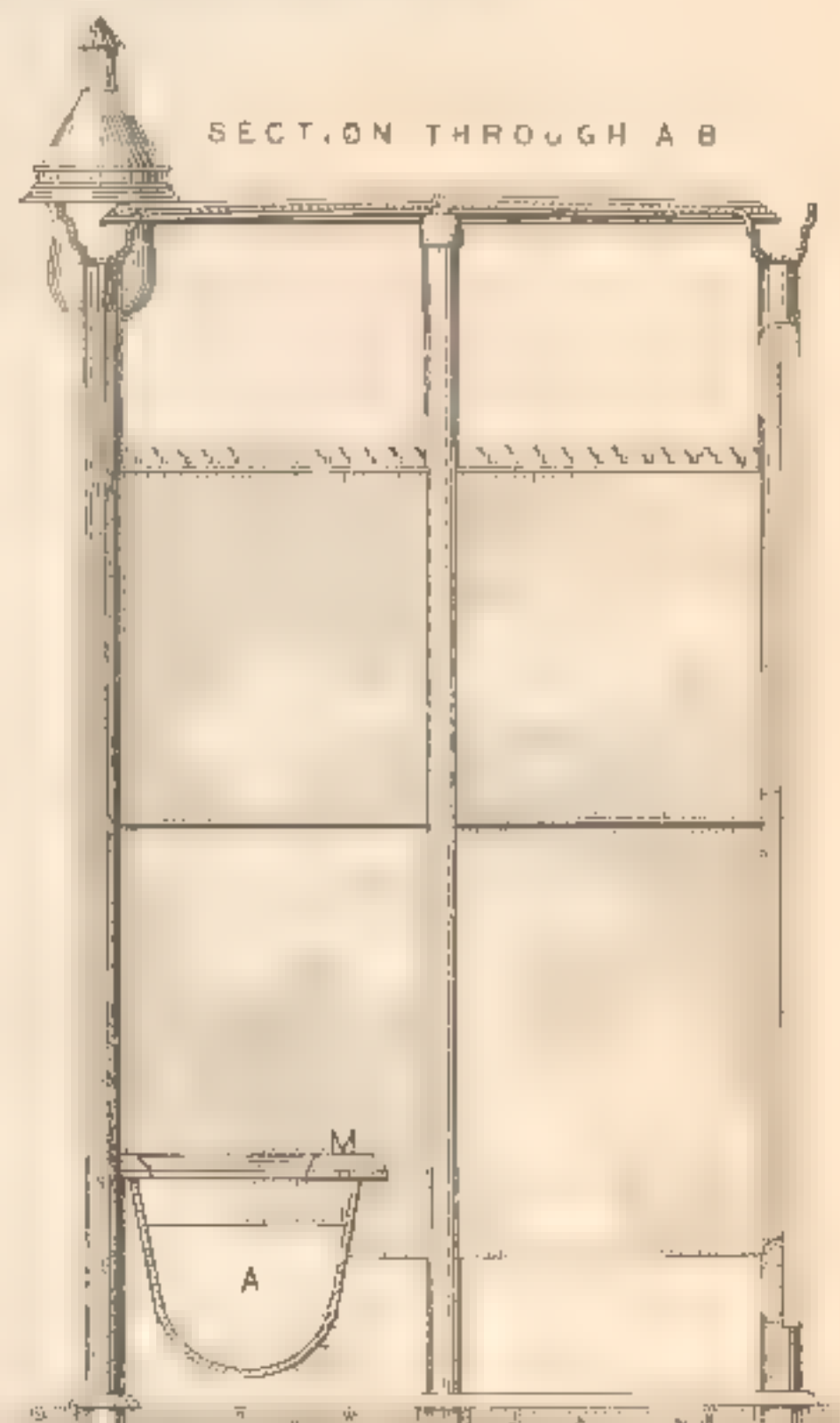
BACK ELEVATION



FRONT ELEVATION A



SECTION THROUGH A B



No. 7 W. C. RANGE is the same in its arrangements as No. 9, but more room is allowed in front of the seats, and the height is greater.

No. 7 W. C. RANGE is particularly suitable for situations where it is desirable to be unconnected with the adjacent buildings. The chaste and unobtrusive character of the structure adapts it for almost any situation, without detracting from the amenity of surrounding objects.

SECTION XV.—ORDURE CLOSETS.

MACFARLANE'S PATENT ORDURE CLOSETS

Long continued observation and experience have demonstrated to us the desirableness of collecting excrementary refuse in such a way as to save the soil to the community, prevent the pollution of rivers, and at the same time maintain the most perfect sanitary laws. Our Ordure Closets meet these general requirements for the great mass of the people, they require neither water nor drains, their first cost is trifling, and being simple and imperishable in their construction, they entail no after expense for repairs. They have been tested under the most trying circumstances for the last fifteen years, and in the most densely populated parts of Glasgow many thousands of the population are now wholly accommodated by them. We refer with pleasure to the following testimonial in their favour:—

From JOHN CARRICK, ESQ., Architect and Superintendent of Works for the City of Glasgow.

STREETS AND BUILDINGS DEPARTMENT, SOUTH A-BION ST
GLASGOW, 1st Feb., 1871.

MESSRS. WALTER MACFARLANE & CO.

GENTLEMEN,—With reference to the Certificate I gave in 1855 and 1861, as to the perfect suitability of your Public Water Closets and Urinals, I beg to state that the further experience of the last nine years fully confirms me in the opinions I then expressed.

Your iron Ordure Closets and Refuse Bins which you have recently fitted up in various closes, &c., in this city, with the sanction of and under the direction of the Local Authority, appointed under the Nuisance Removal (Scotland) Act, afford the most perfect sanitary arrangements for promoting cleanliness and comfort to the masses who inhabit the densely built portions of our city, and go a great way, in my opinion, to solve the difficulty as to the best means of utilizing the soil of large towns, and preserving the purity of our rivers and streams.

I am, Gentlemen, Your Obedient Servant,

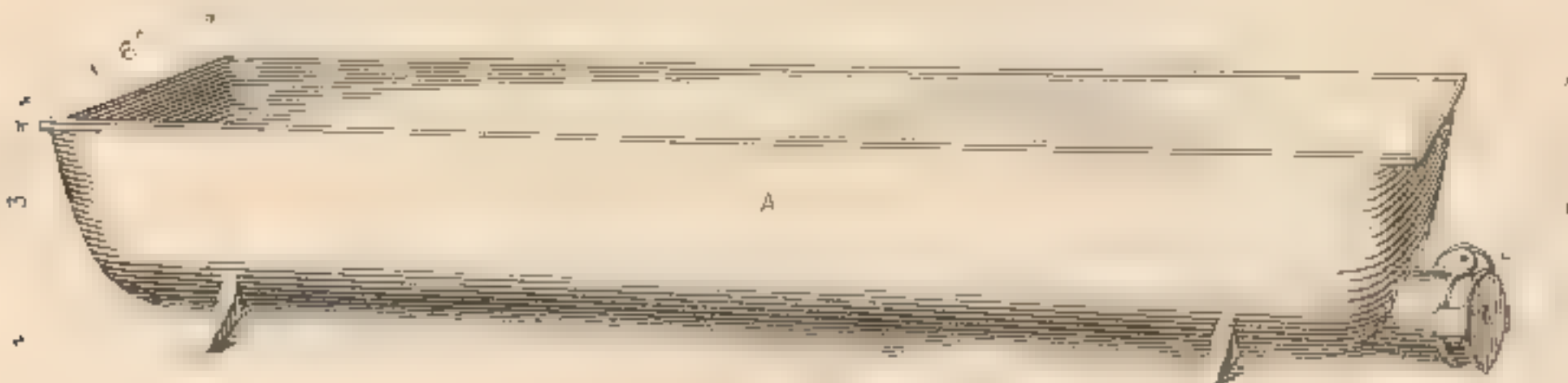
JOHN CARRICK.

Any of our various kinds of Ordure Closets can be so modified as to suit particular circumstances and situations. See page 592 for examples of various arrangements and combinations with Urinals and Ash Bins.

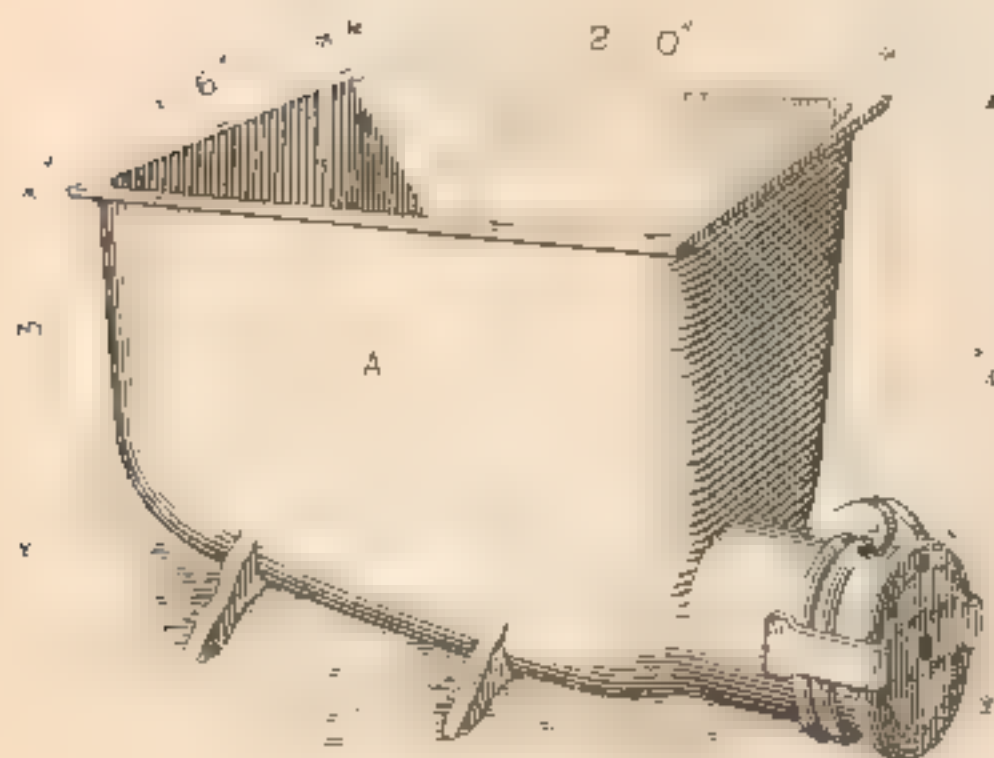
Architects, surveyors, &c., will please specify in their schedules the description of Ordure Closet, by giving the No. and how many persons are to be accommodated, also whether for males or females, along with any other necessary information.

On receiving a rough plan of the proposed site, with adjacent buildings, and the probable number of persons to be accommodated, we shall be glad to furnish (*free of charge*), a ground plan of the arrangements we would suggest for adoption.

NO 12 RANGE



NO 12 FOR ONE PERSON



NO. 12 ORDURE CLOSET consists of an oblong trough A, the bottom of which is egg-shaped, with an inclination towards the discharge end. The discharge apparatus consists of an inclined pipe, projecting from the deep end of the trough to the outside of the building, and on the end of this pipe is a discharge valve D, hinged and fitted with lock. The gearing is thus only at the command of the person whose duty it is to discharge the contents.

When requiring to be emptied, place the bucket (illustrated at page 590), under the the valve, as shown at page 580, then open the valve, and the contents will fall into the bucket. Draw forward with the Ordure Scraper (illustrated on page 590) any of the more solid parts resting on the bottom of the trough. The operation of discharging only requires to be done once every day, and is the work of a few minutes.

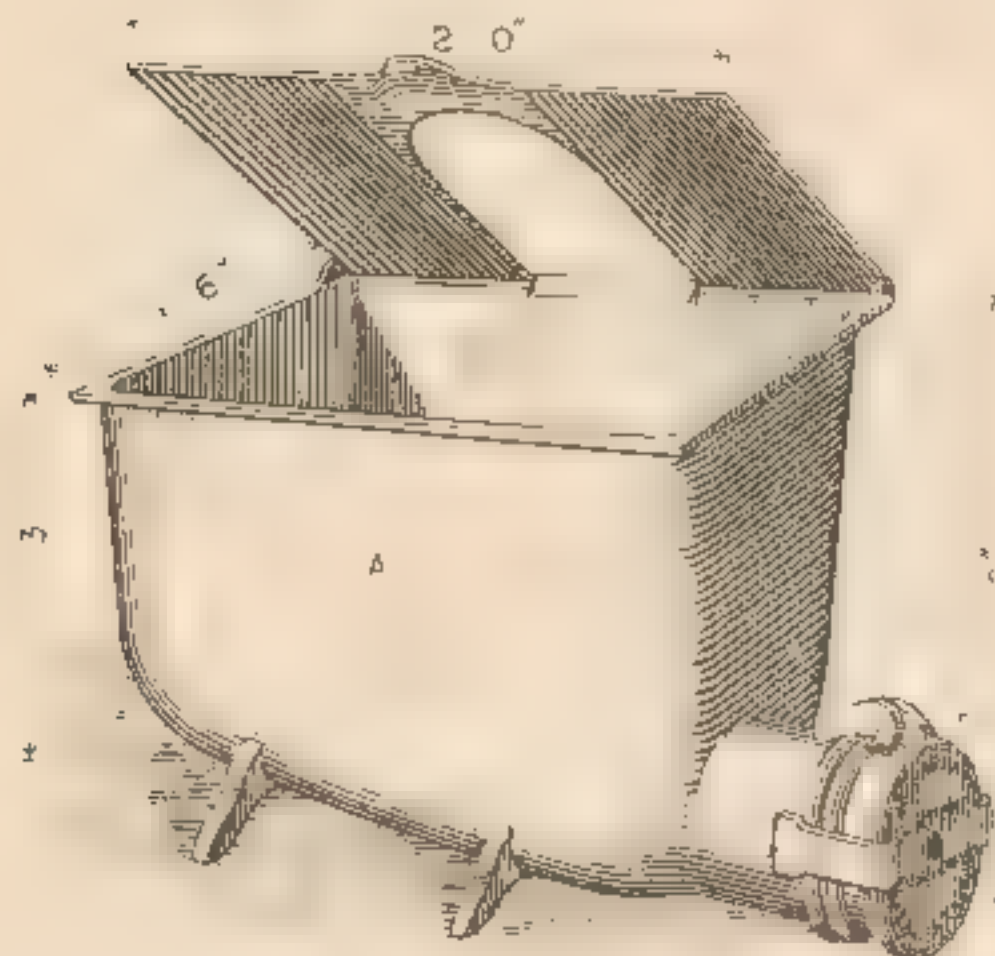
NO. 12 ORDURE CLOSET is, in its construction, in every respect the same as our more expensive kinds, the difference in price arising entirely from the absence of seats, divisions, or other external attachments, which may be added of any form or material most suitable for the situation.

MACFARLANE'S PATENT ORDURE CLOSETS

No 13 RANGE



No 13 FOR ONE PERSON

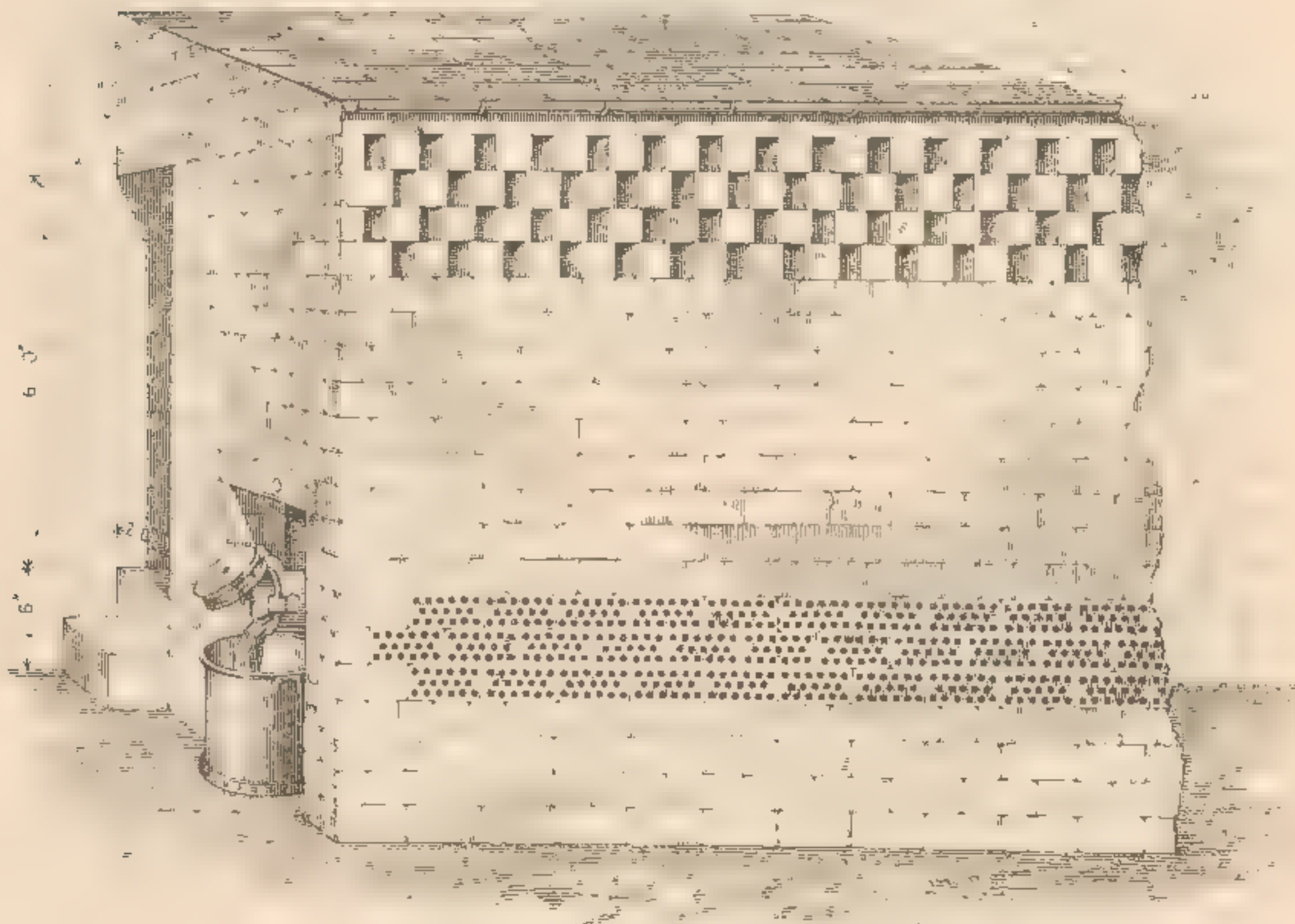


No. 13 ORDURE CLOSET is in every respect the same as No. 12, but with the addition of hinged seats M, consisting of iron plates covered with wood, with an oblong space terminating at the back with an iron cope, thus giving a more open passage for the soil, and a degree of cleanliness not attainable by the usual oval opening.

No. 13 ORDURE CLOSET is not much higher in price than No. 12, whilst the shape and substantial construction of the seats offer advantages for its adoption. A space of one inch is left between the seats, so that partitions may be added of any form or material suitable for the situation.

Nos. 12, 13, and 14 ORDURE CLOSETS are intended for being fitted up in brick buildings. In the erection of such, little or no effort has hitherto been made to improve their construction, and with the view of doing so, we submit for consideration the following illustration of an improved brick erection.

ELEVATION OF BRICK WORK



The interior pavement is 18 inches above the ground, and is approached by means of a step on the outside; the walls are 9 inches thick, having three rows of perforated bricks immediately behind the closet trough, commencing from the floor, whilst four rows of open brick-work near the roof give light and ventilation. The discharge valve D, of Ordure Closet, projects through the opening in the end. The illustration shows the operation of discharging the contents into the Ordure Bucket. It cannot be too well impressed on the public, that the direct rays of light are of vital importance to the freshness of such erections, and should not be obstructed by panes of glass. This remark applies both to Water and Ordure Closets.

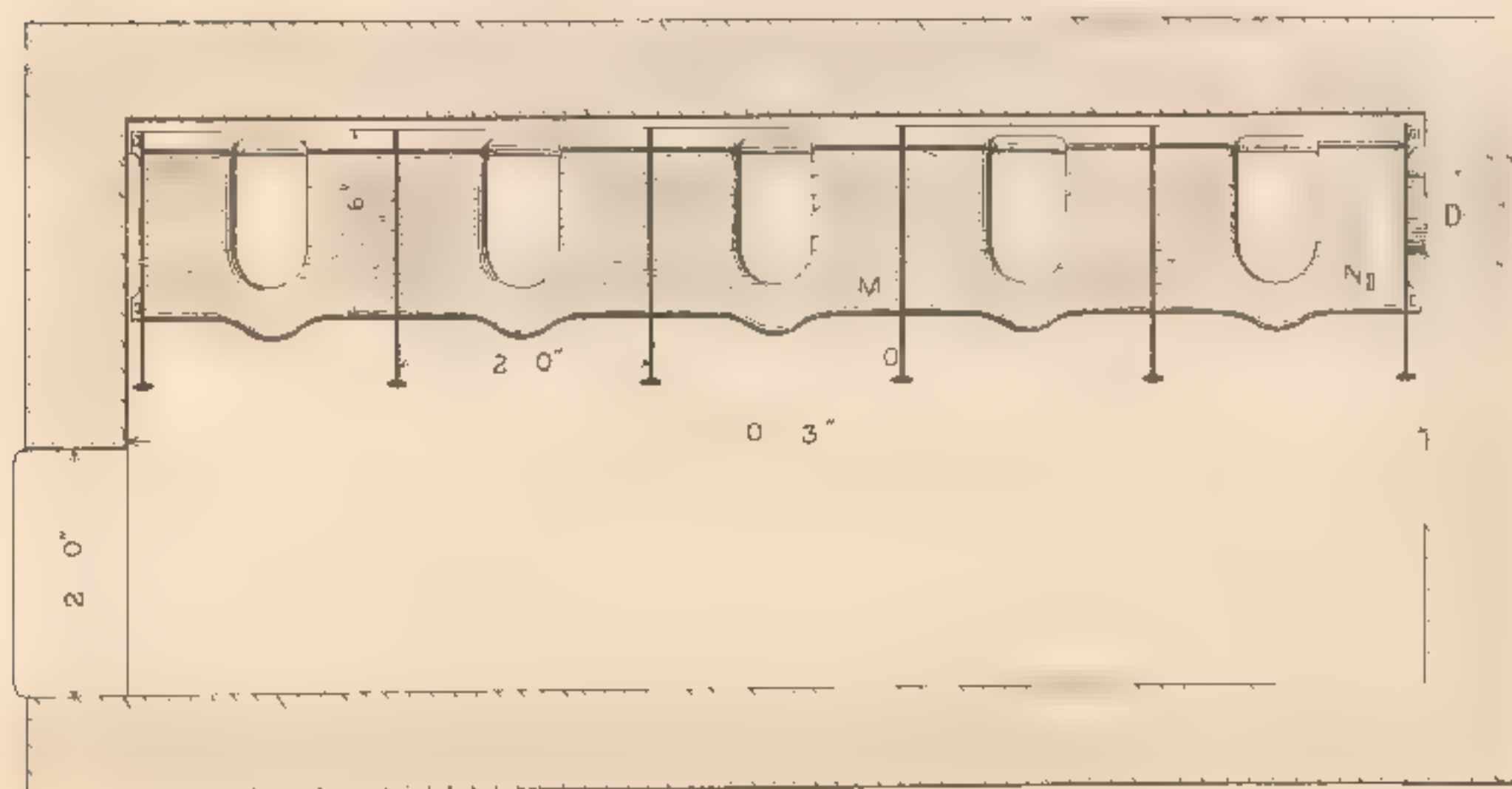
MACFARLANE'S PATENT ORDURE CLOSETS

No 14 RANGE

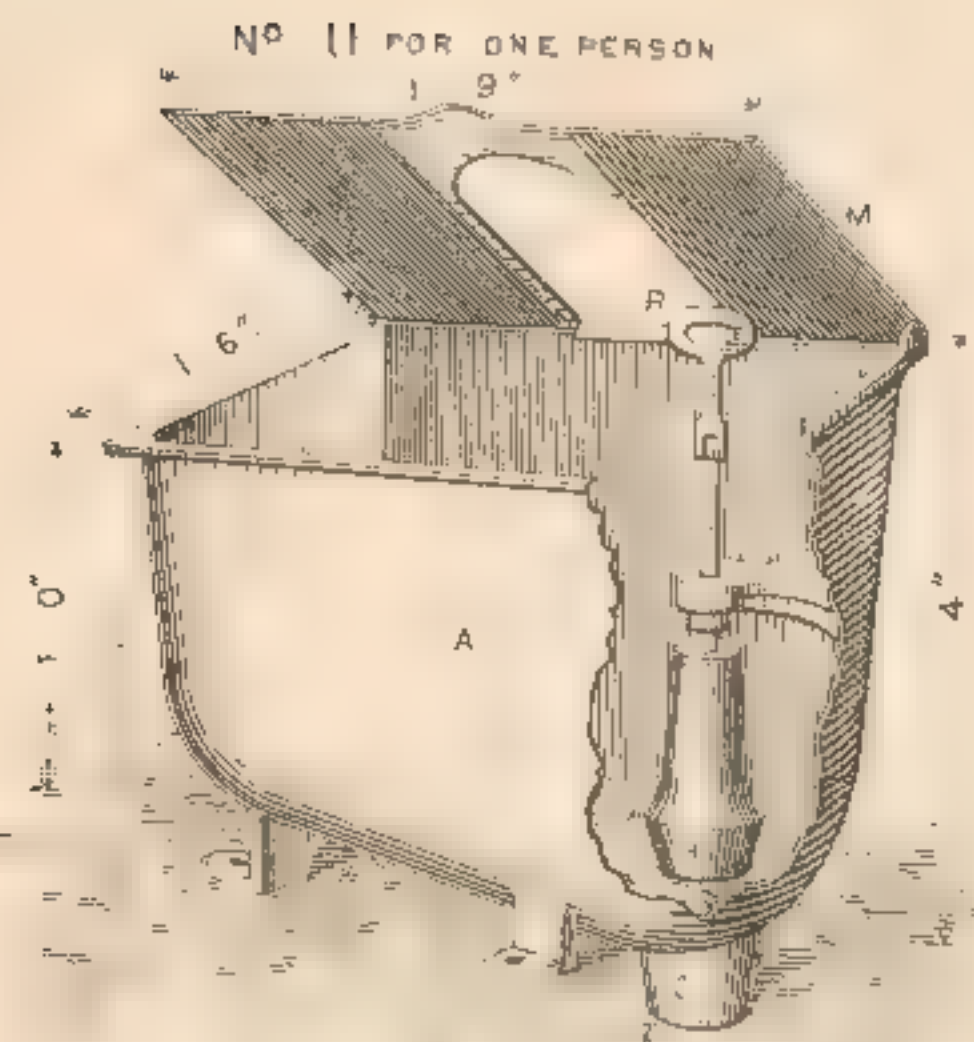
ELEVATION



PLAN



No. 14 ORDURE CLOSET is in every respect the same as No. 2, but each seat is separated by an iron partition O, and back guard plate P. The partition O gives privacy and comfort, whilst the back guard plate P, prevents any person from standing on the seats. The illustration shows the closet fitted up in a building, which may be of any suitable material. See illustration of improved brick erection, page 580.



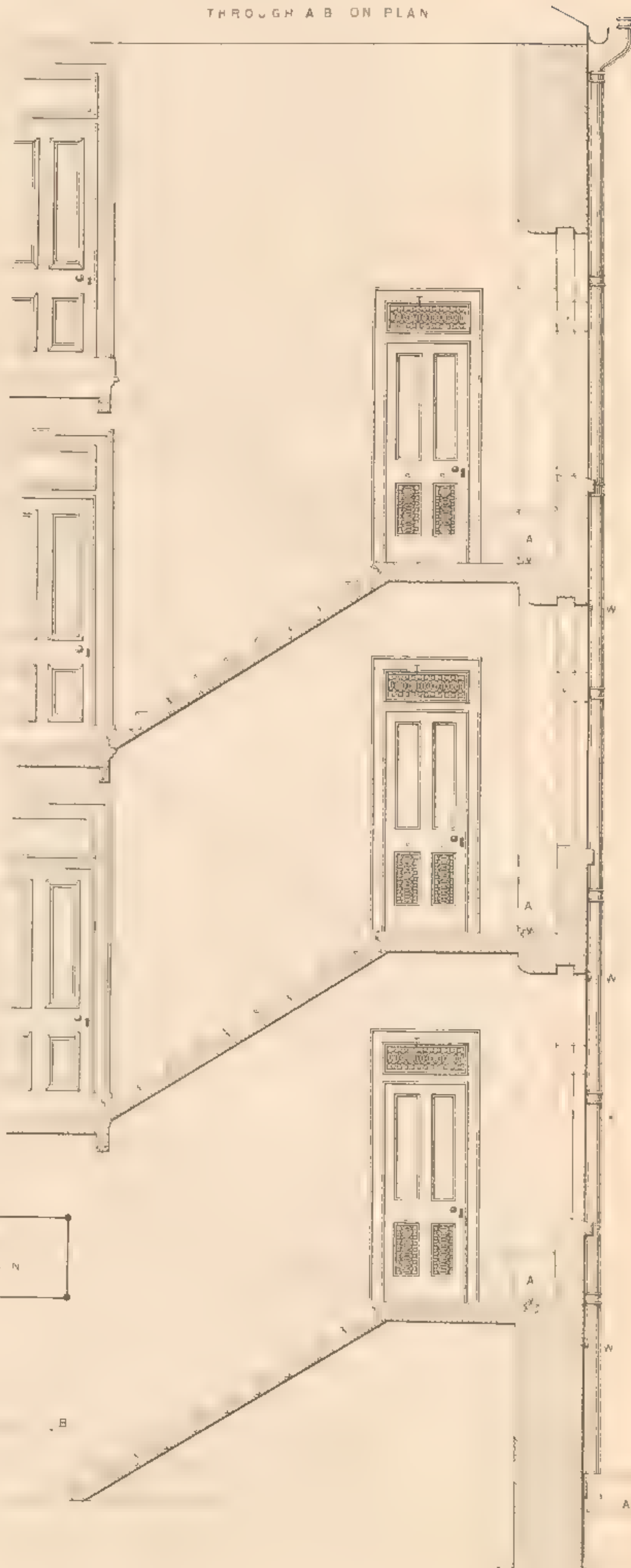
No. 11 ORDURE CLOSET consists of an oblong trough A, the bottom of which is egg-shaped, with an inclination towards the discharge end. In the bottom is the discharge pipe C, fitted with plug H, which in the operation of discharging, is raised by means of a key R. The key is separate from the apparatus, and may be carried by the person whose duty it is to discharge the contents. The trough is fitted with a hinged seat the same as No. 13, but without lock.

The plan and section show the application of No. 11 Ordure Closet to buildings in flats, and in combination with the Ash Bin. The closet is placed on the half landing of each stair. Two perforated cast-iron panels S S, are fitted into the lower portion of the door, and another, T, immediately above the transom lintel. An opening, U, is also made in the wall of the building, near the roof of the closet, directly to the outside. By these means, not only is the most perfect ventilation secured, but the direct rays of light being admitted, their deodorizing properties are not impaired, as they would be by the interposition of panes of glass.

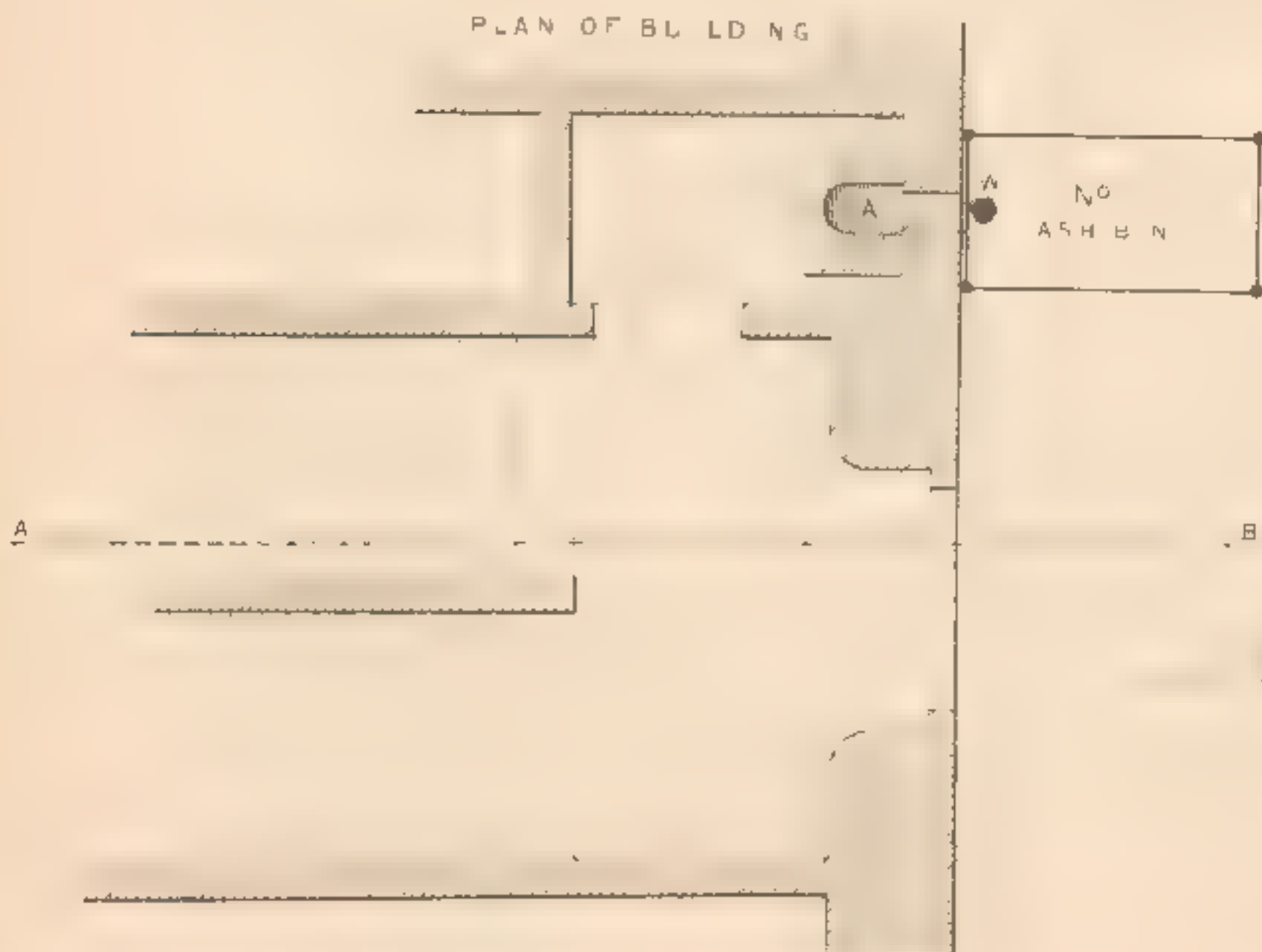
The trough is placed next the outer wall of the building, and the discharge pipe V, connected by an elbow to the soil pipe W, which passes down the outside of the building from the eave to the Ash Bin, and is open at both ends. The contents of the closet should be discharged daily into the ashes, which act as a deodorizer, the whole forming a valuable manure.

These arrangements may be modified to suit particular circumstances.

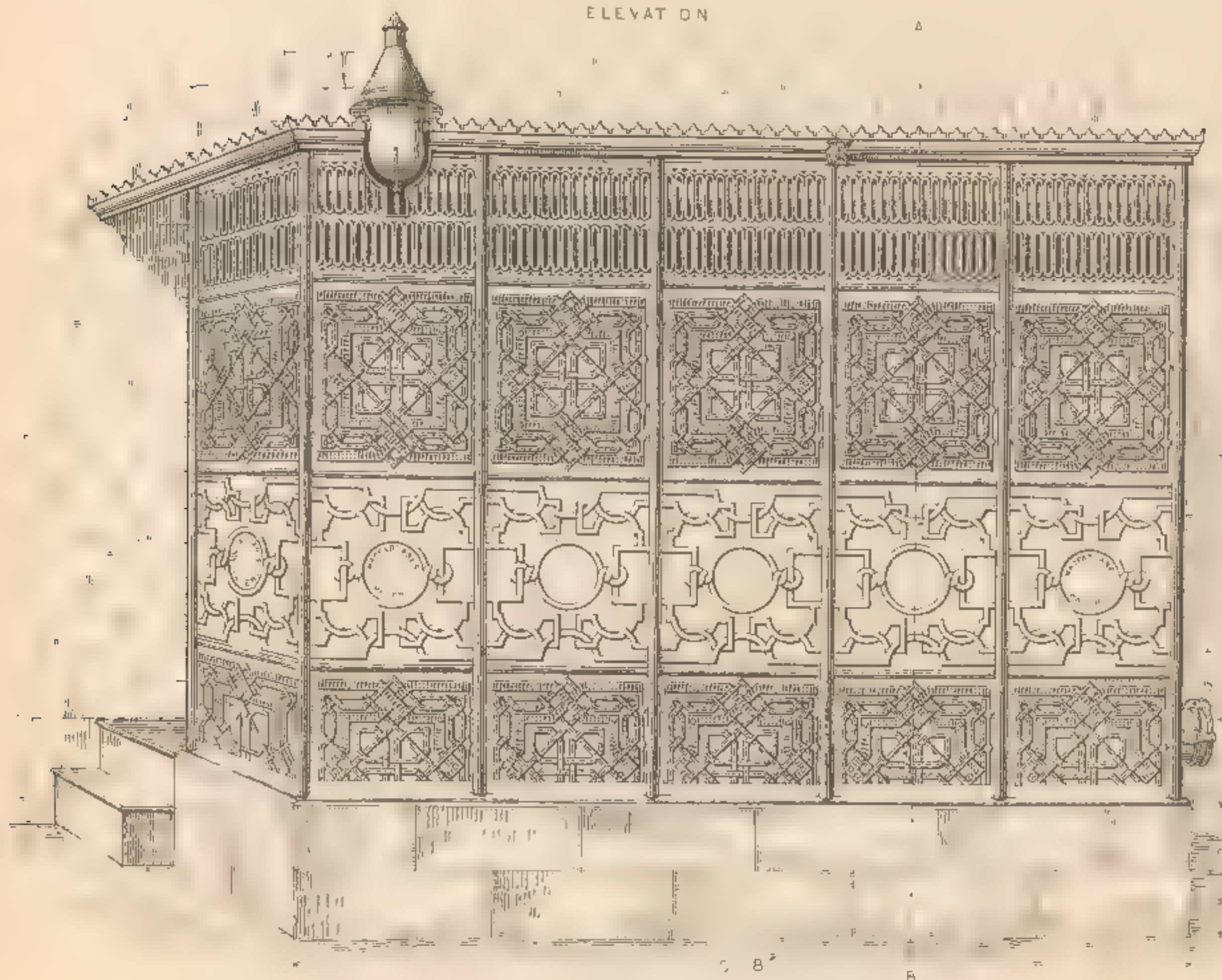
SECTION OF BUILDING
THROUGH A B ON PLAN



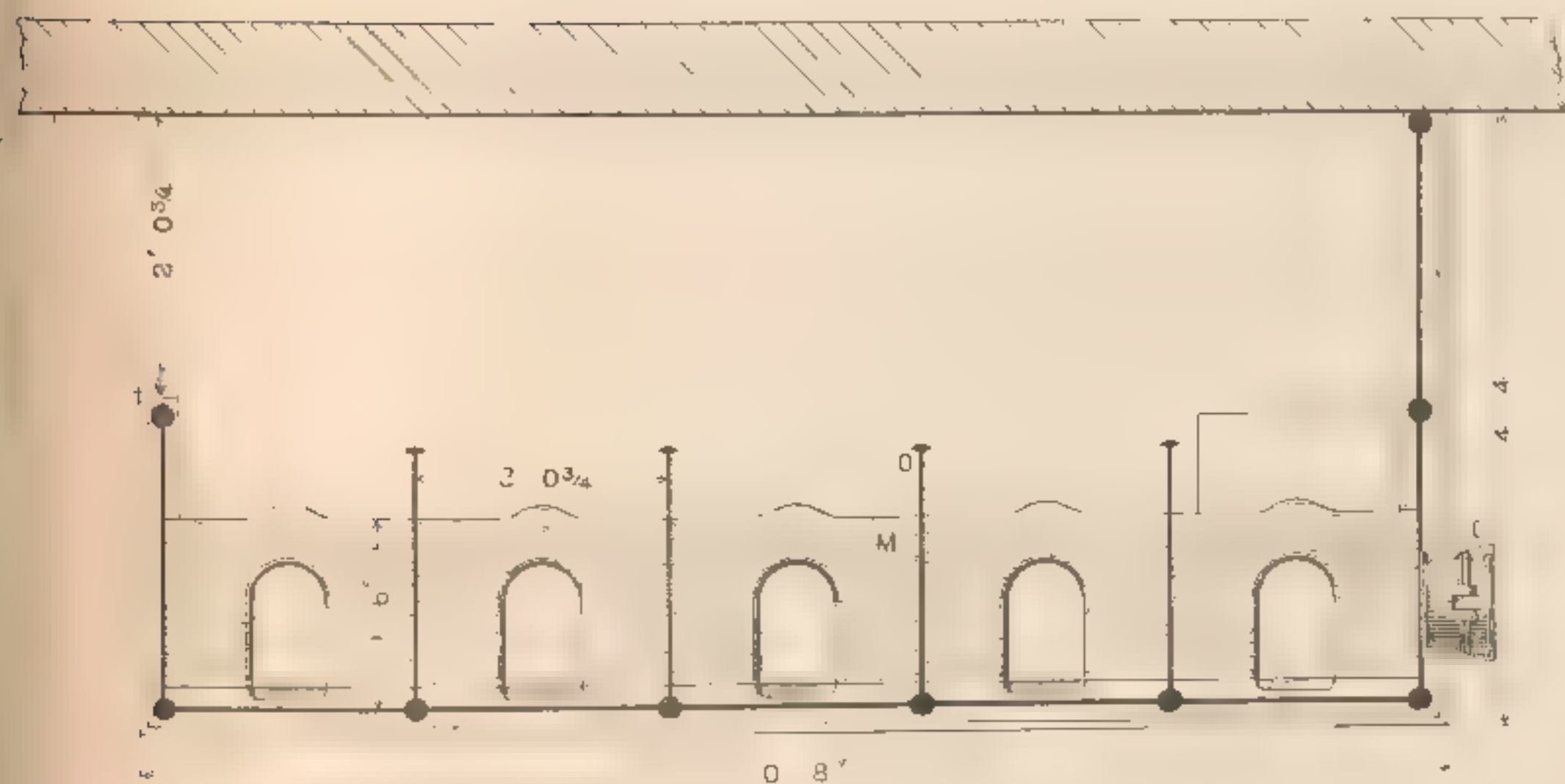
PLAN OF BUILDING



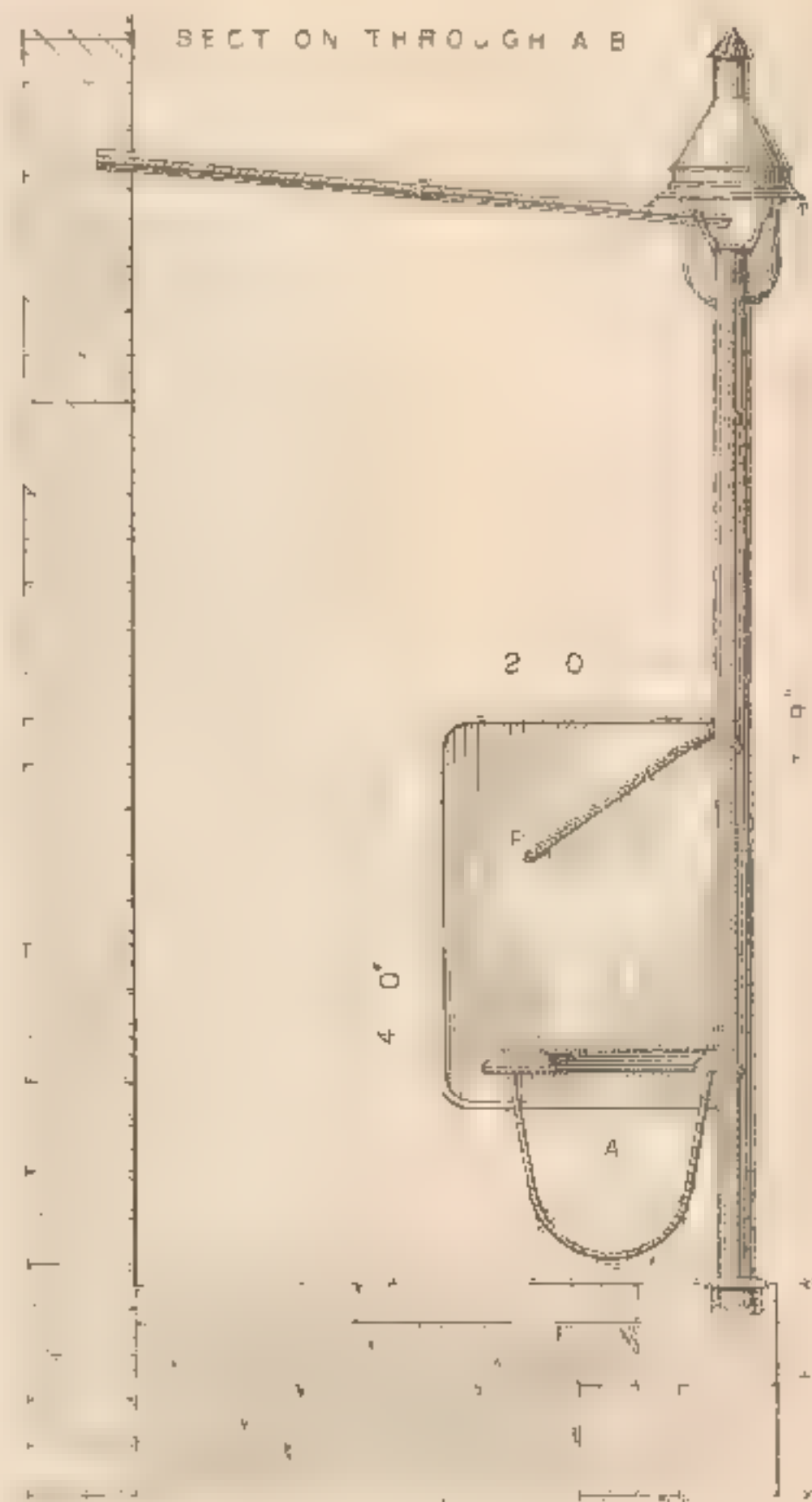
NO 15 RANGE
ELEVATION



PLAN



SECTION THROUGH A B



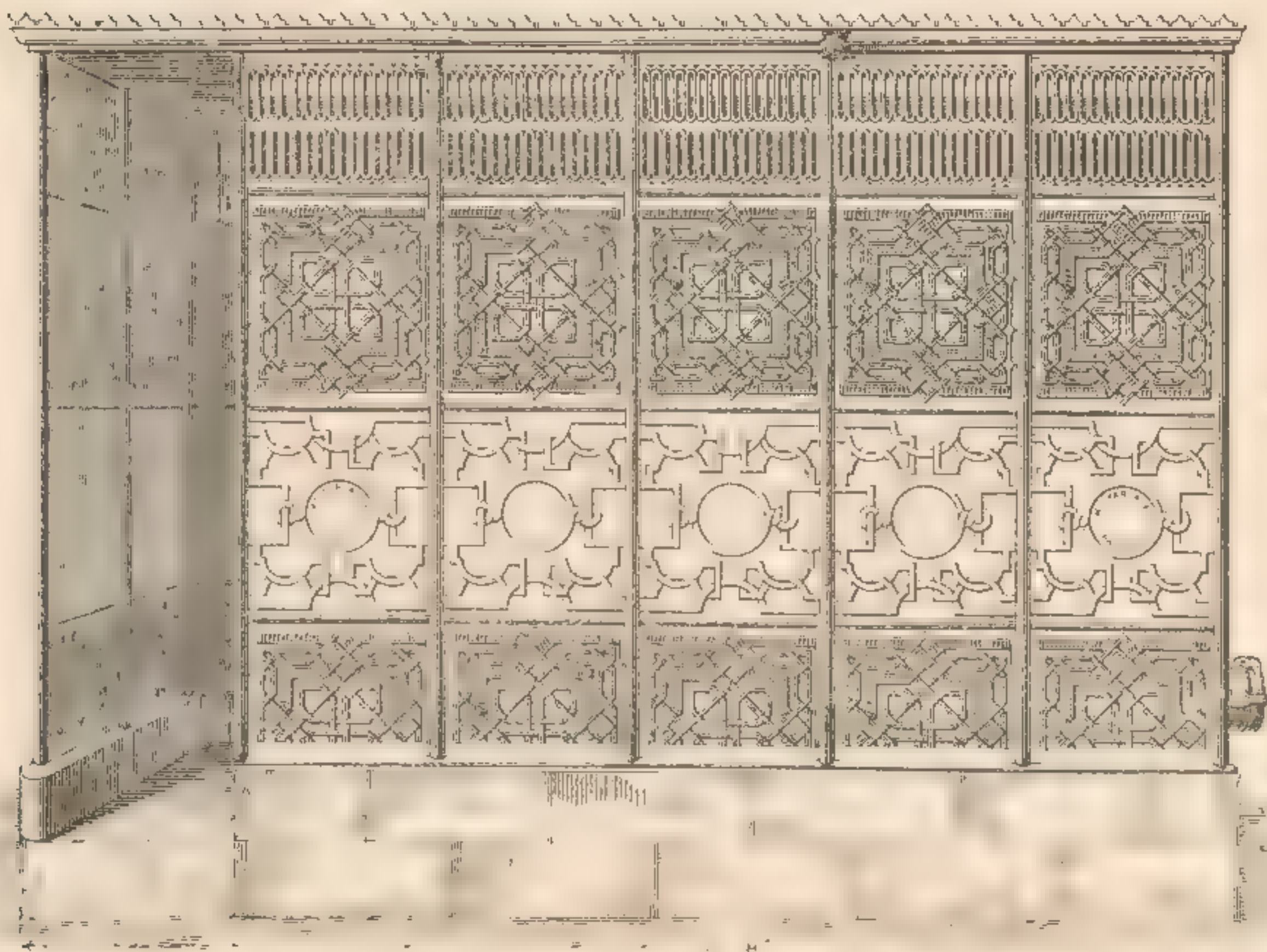
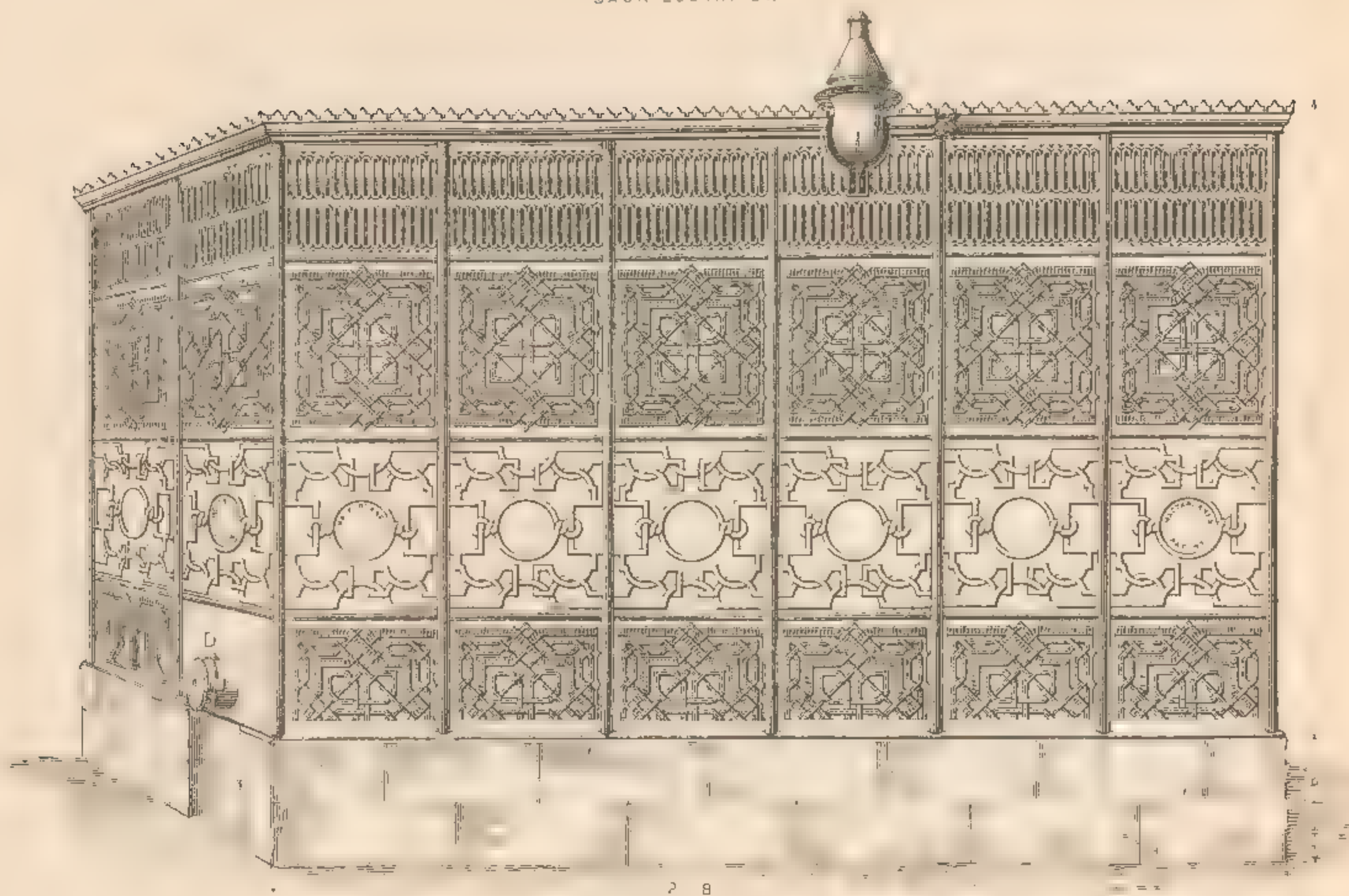
No. 15 ORDURE CLOSET RANGE is similar in its interior arrangements to No. 14. The front, end walls, and roof are wholly composed of ornamental cast-iron plates and pillars, all dove-tailed together, the whole structure being placed against a wall, and resting on base rail. It is lighted and ventilated by open fret-work L, and perforated plates Q, and at night it is lighted by gas lamp. No door is required on the entrance, but in situations where necessary a screen can be placed opposite.

No. 15 ORDURE CLOSET has many advantages to recommend its adoption. The material being cast-iron, is in its nature indestructible; whilst the ventilation, by means of the fret-work and perforated plates, produces a marvellous degree of freshness and entire freedom from smell.

MACFARLANE'S PATENT

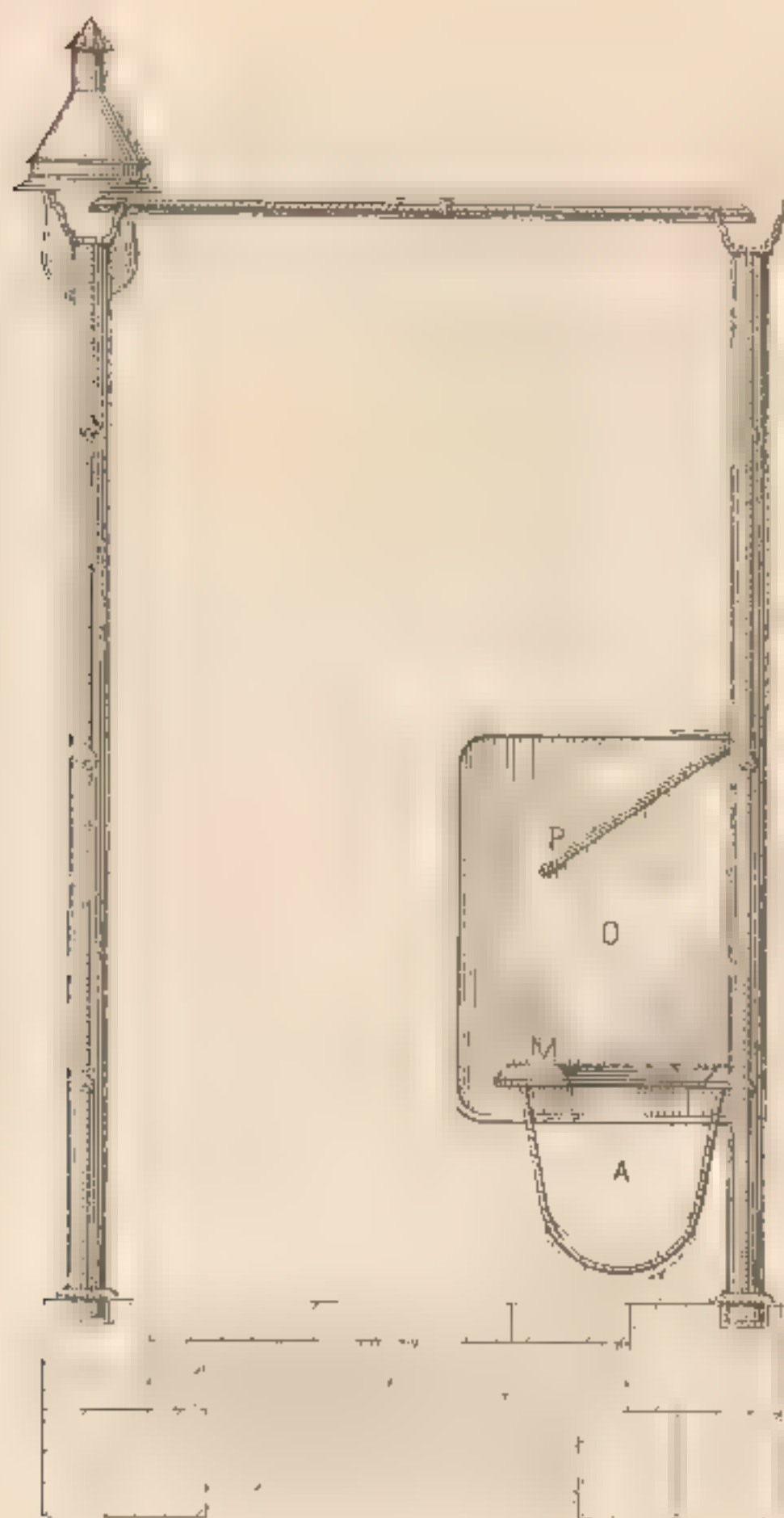
NO 6 RANGE

BACK ELEVATION

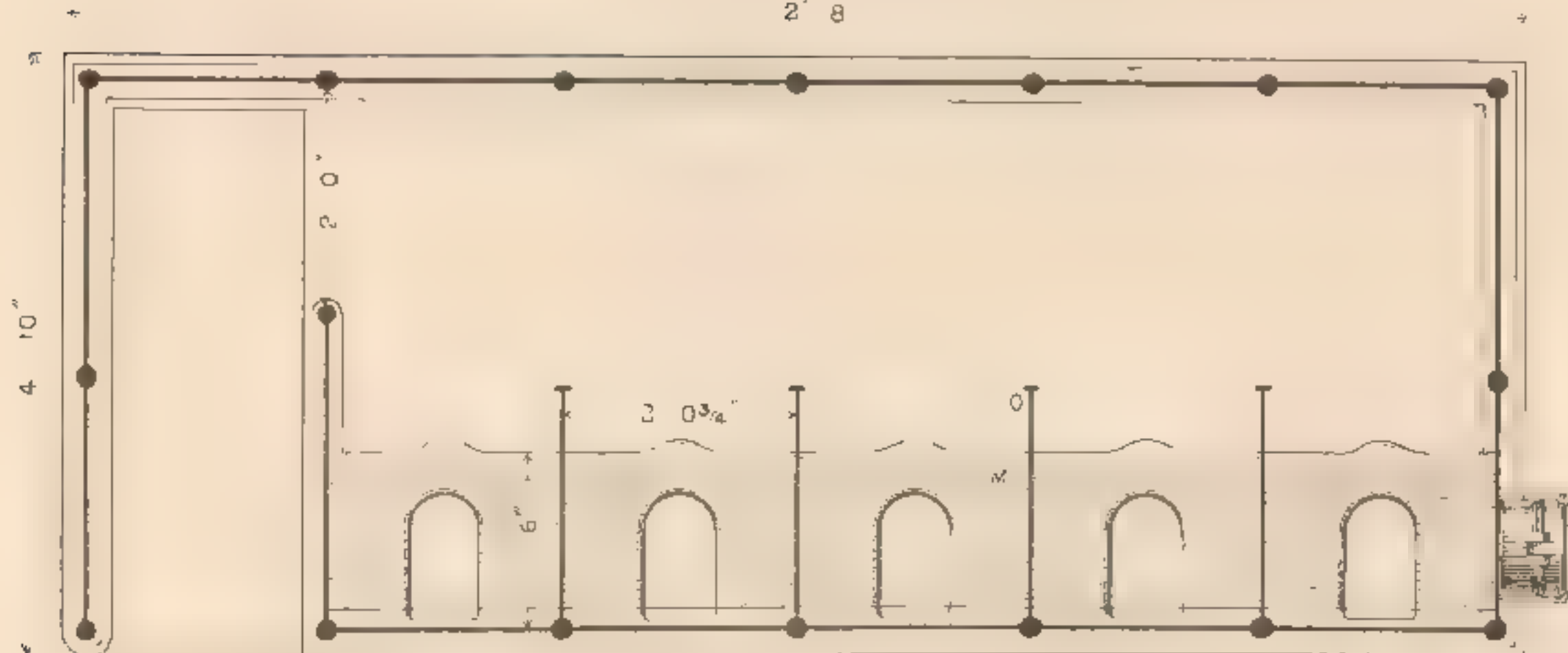


ORDURE CLOSETS

NO 16 RANGE
SECTION THROUGH A B



PLAN
2' 8"



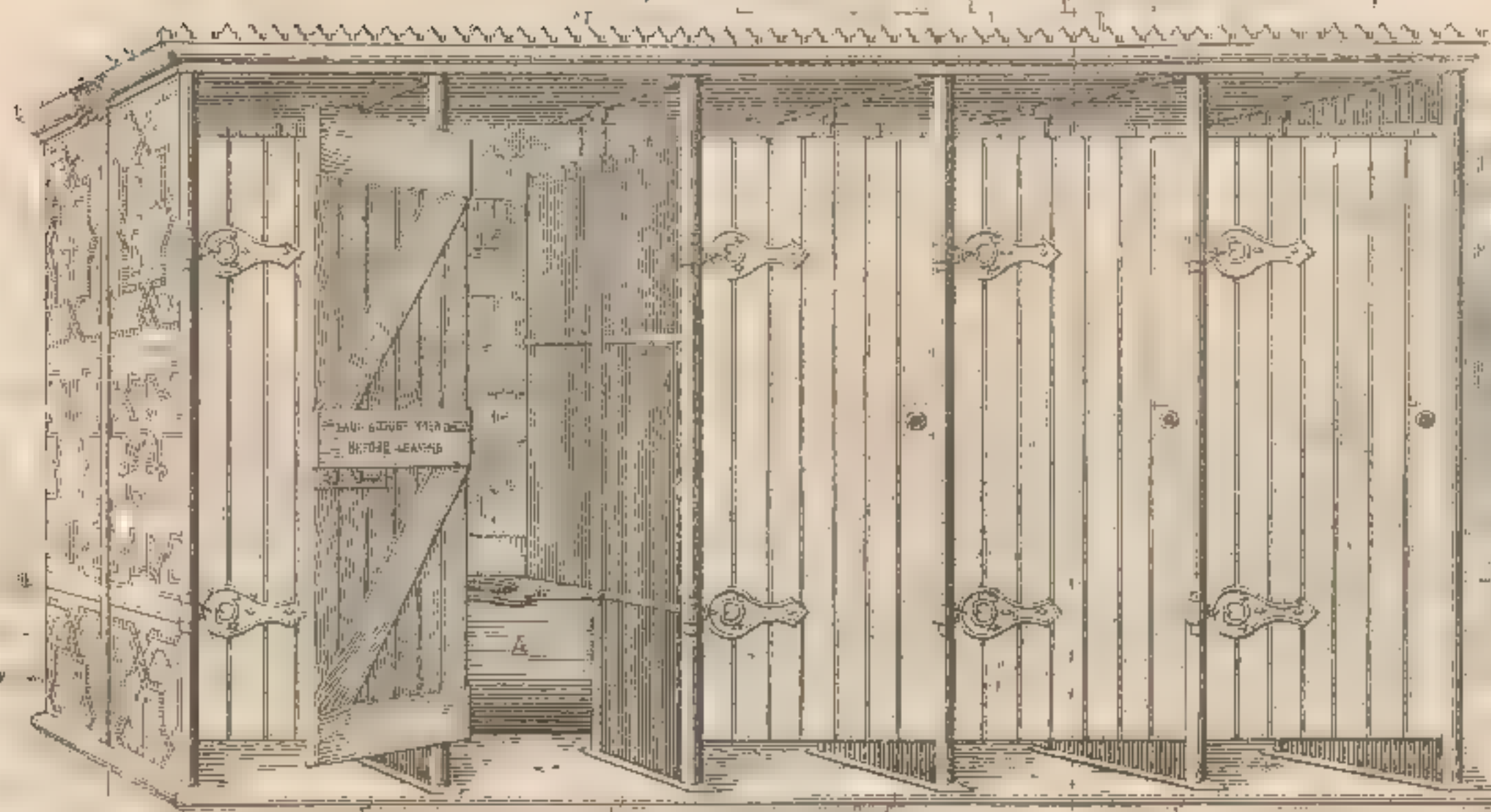
No. 16 ORDURE CLOSET RANGE is similar in its interior arrangements to No. 15. The external walls and roof are wholly of cast-iron, the open fret-work L, and perforated plates Q, give light and ventilation to the interior, whilst the lamp lights it at night. When more than five persons are to be accommodated, there is an entrance at each end.

No. 16 ORDURE CLOSET RANGE is well adapted for situations where it is desirable to be unconnected with the adjacent buildings; the chaste and unobtrusive character of the structure adapts it for almost any situation, without detracting from the amenity of the surrounding objects.

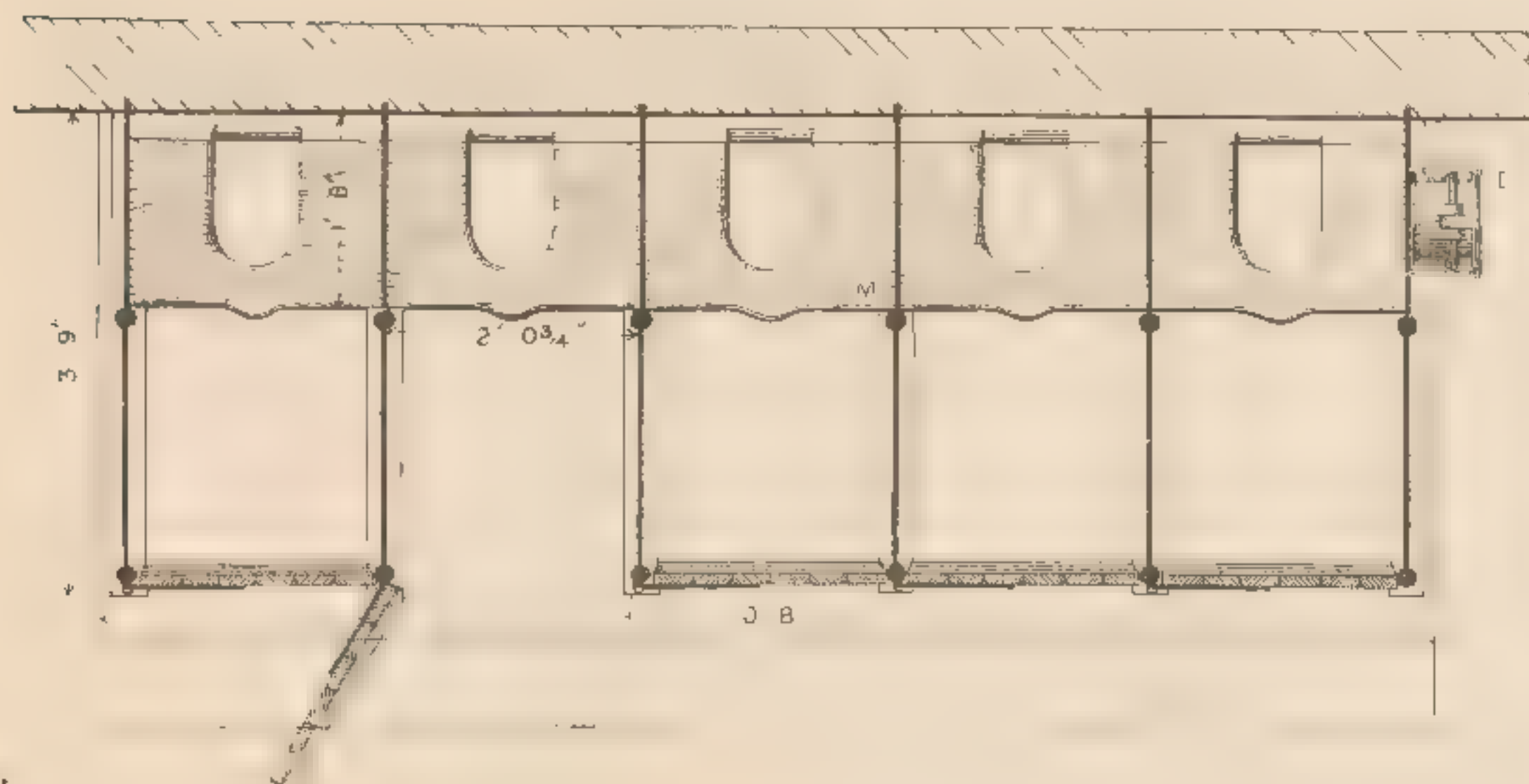
MACFARLANE'S PATENT ORDJRE CLOSETS

No 17 RANGE

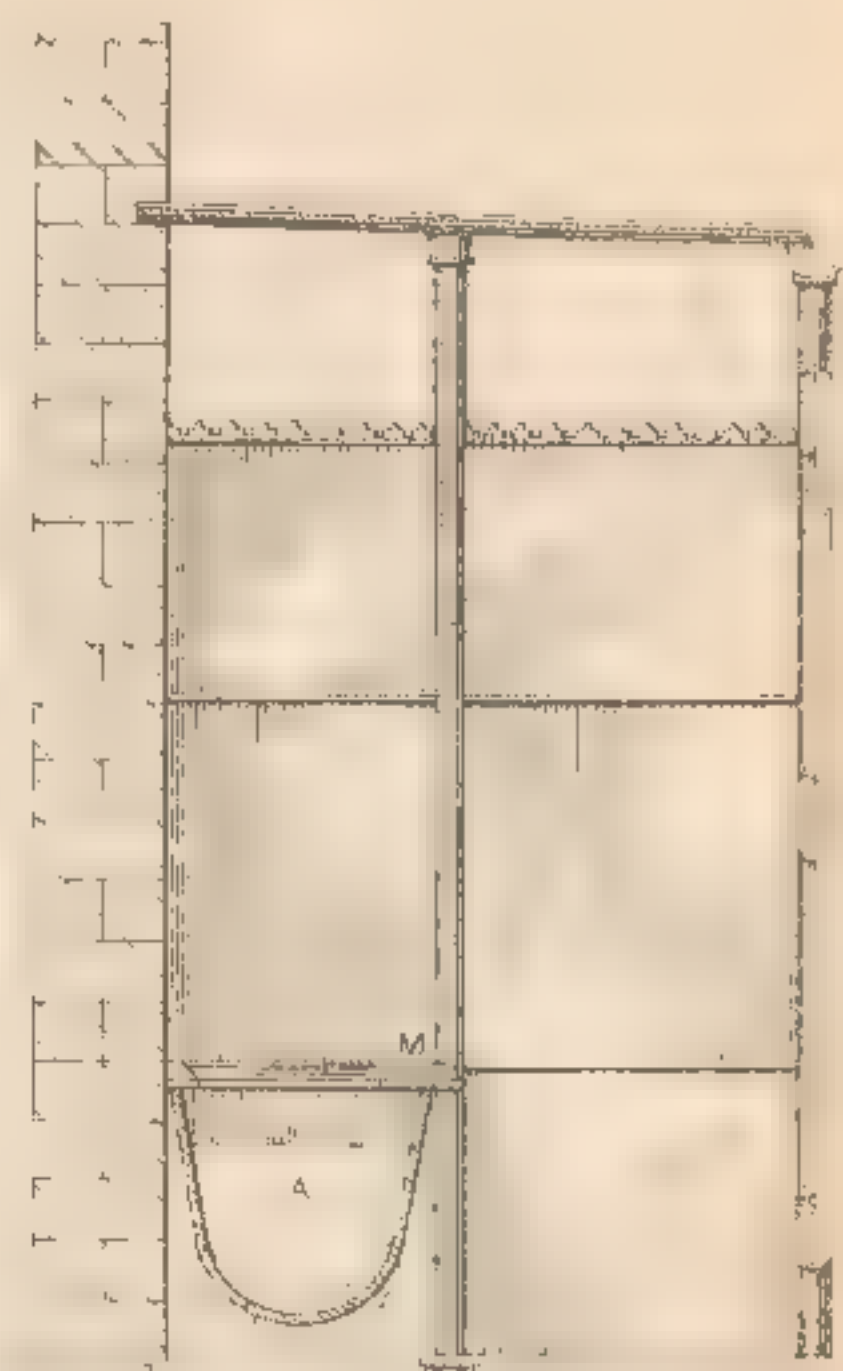
ELEVATION



PLAN



SECTION THROUGH A B



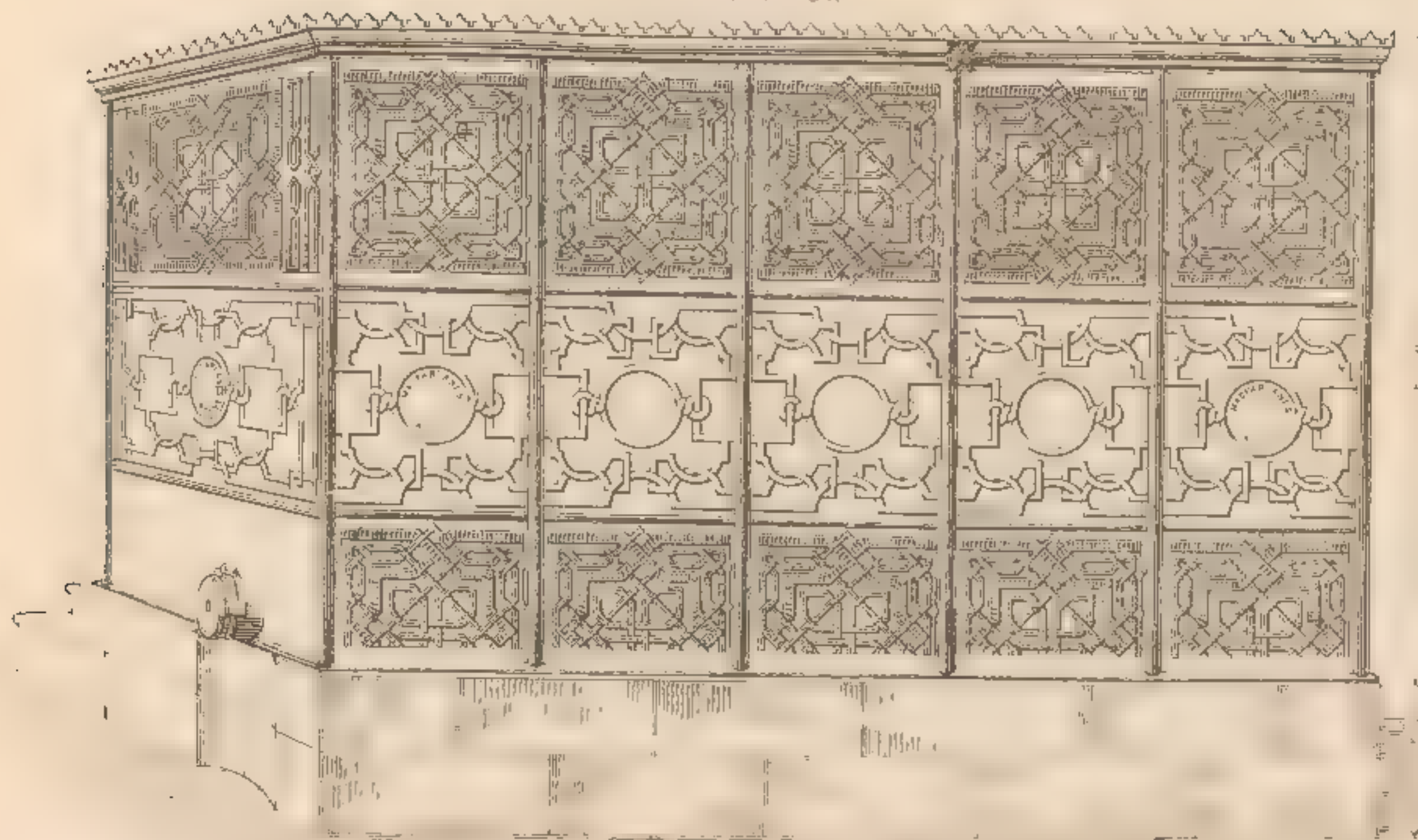
No. 17 ORDJRE CLOSET RANGE is divided into compartments, each having a separate door; the partitions, walls, and roof are wholly composed of cast-iron plates and pillars, all dove-tailed together, the whole structure being placed against a wall, and resting on base rail.

No. 17 ORDJRE CLOSET RANGE will be found particularly suitable for schools, &c., when the adjacent buildings can be taken advantage of for forming the back wall of the closet.

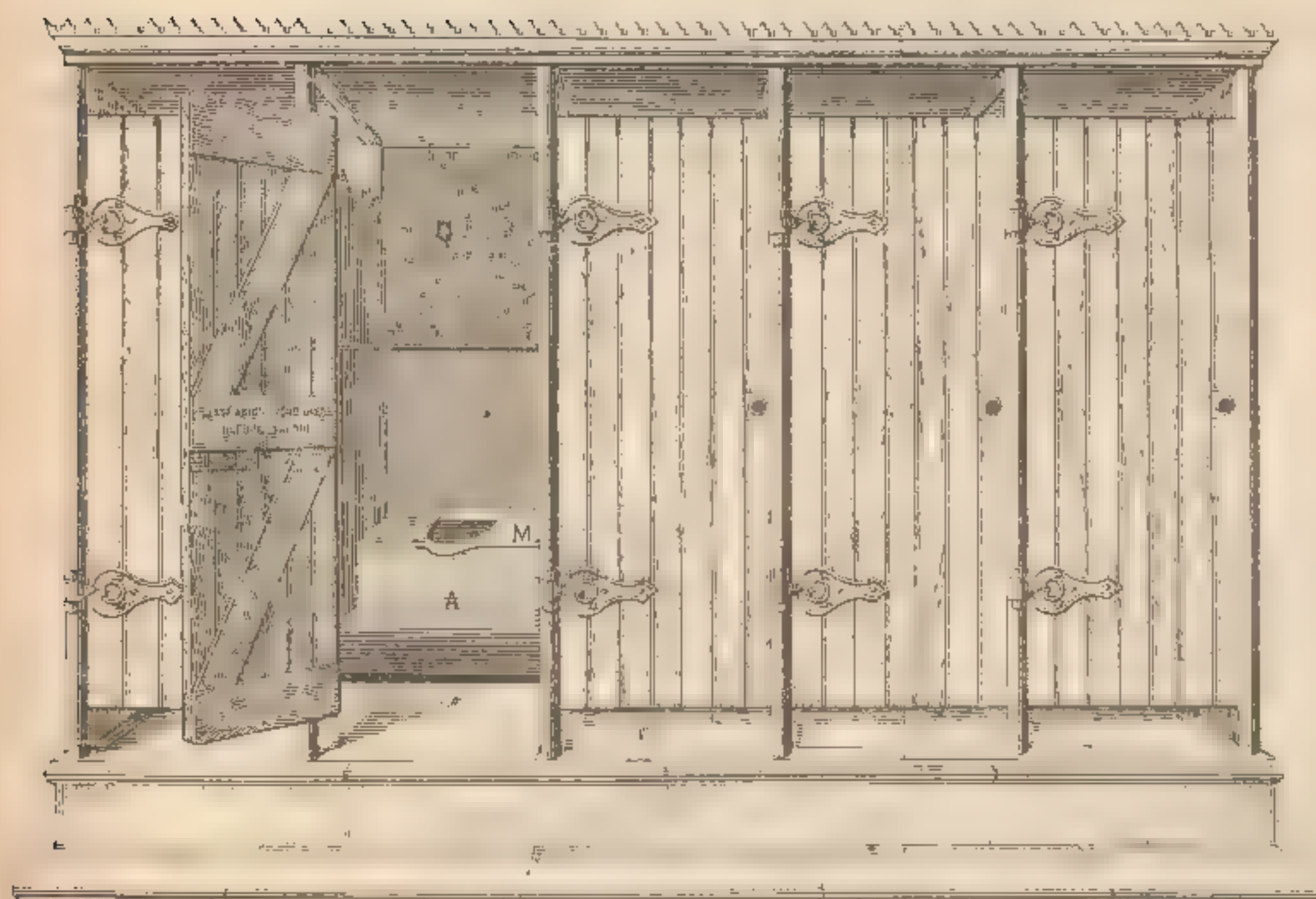
MACFARLANE'S PATENT ORDURE CLOSETS

557

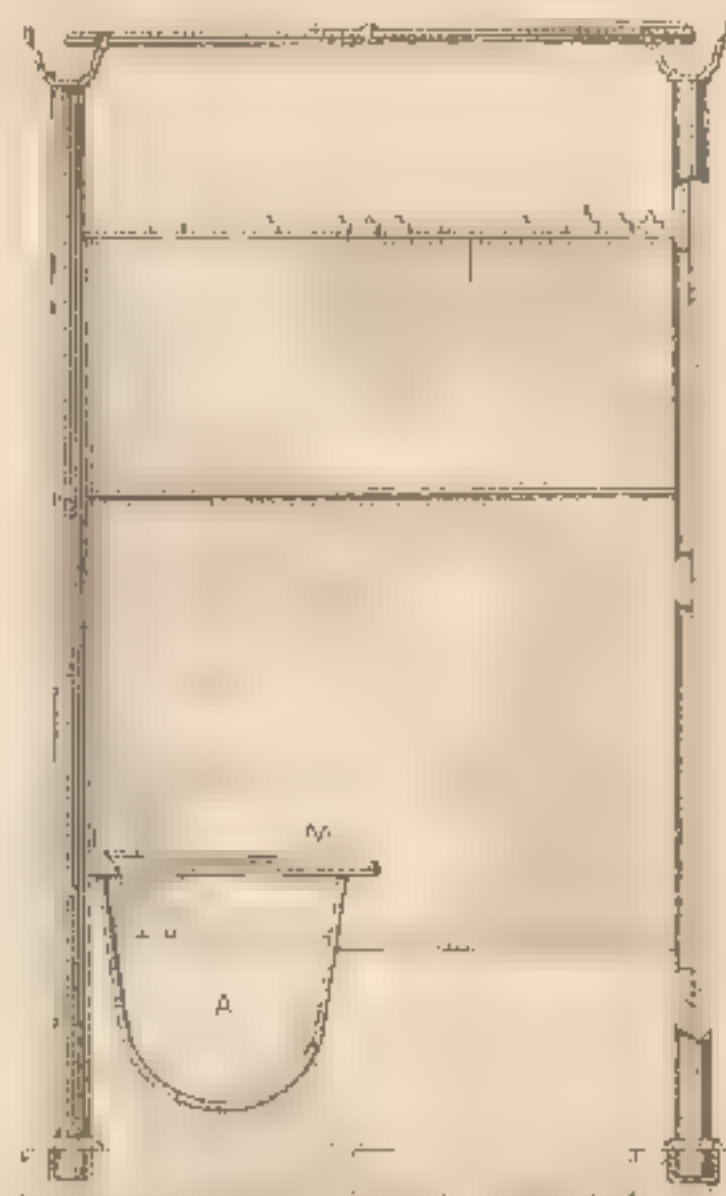
NO. 8 RANGE
BACK ELEVATION



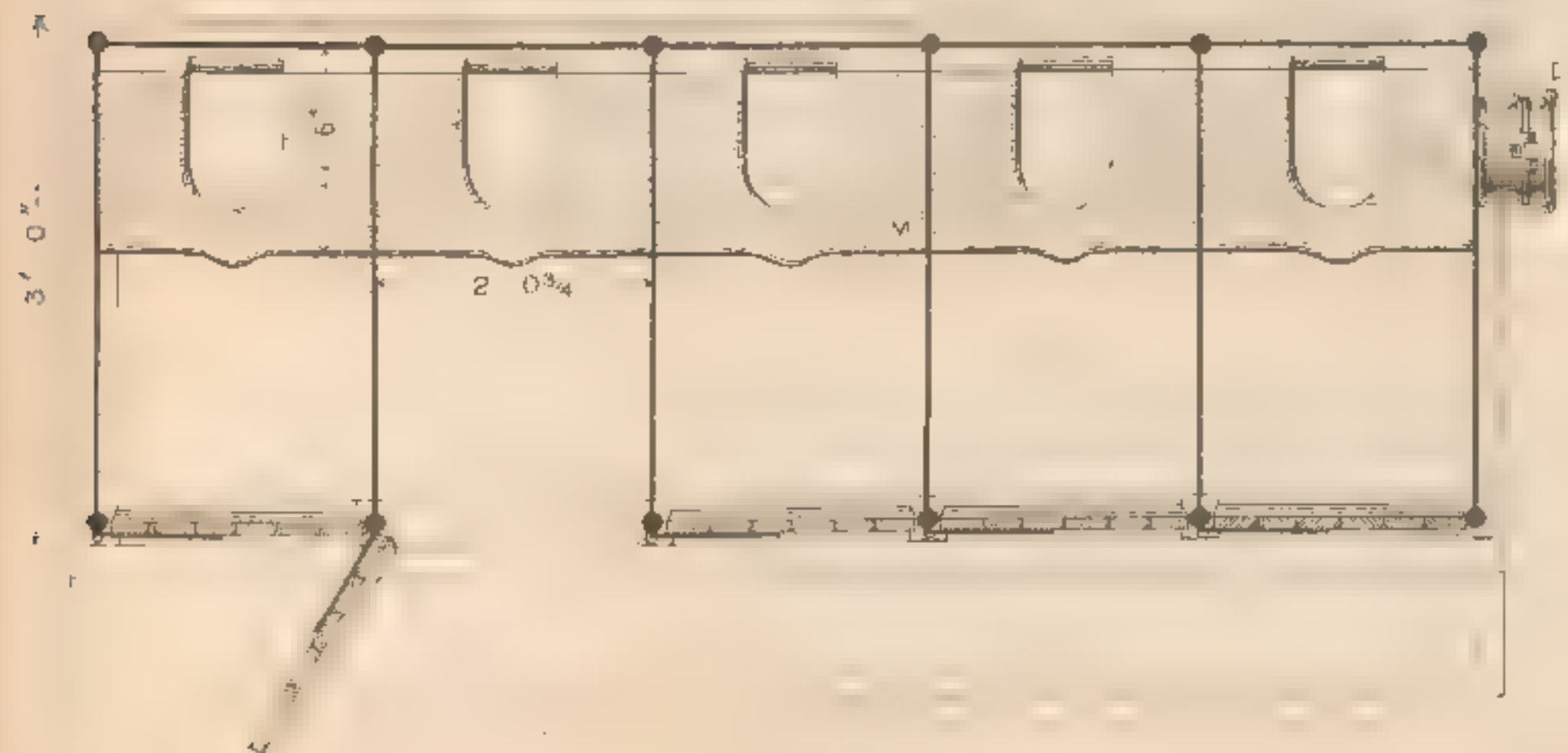
FRONT ELEVATION



CUT IN THE H A B



PLAN
NO. 8



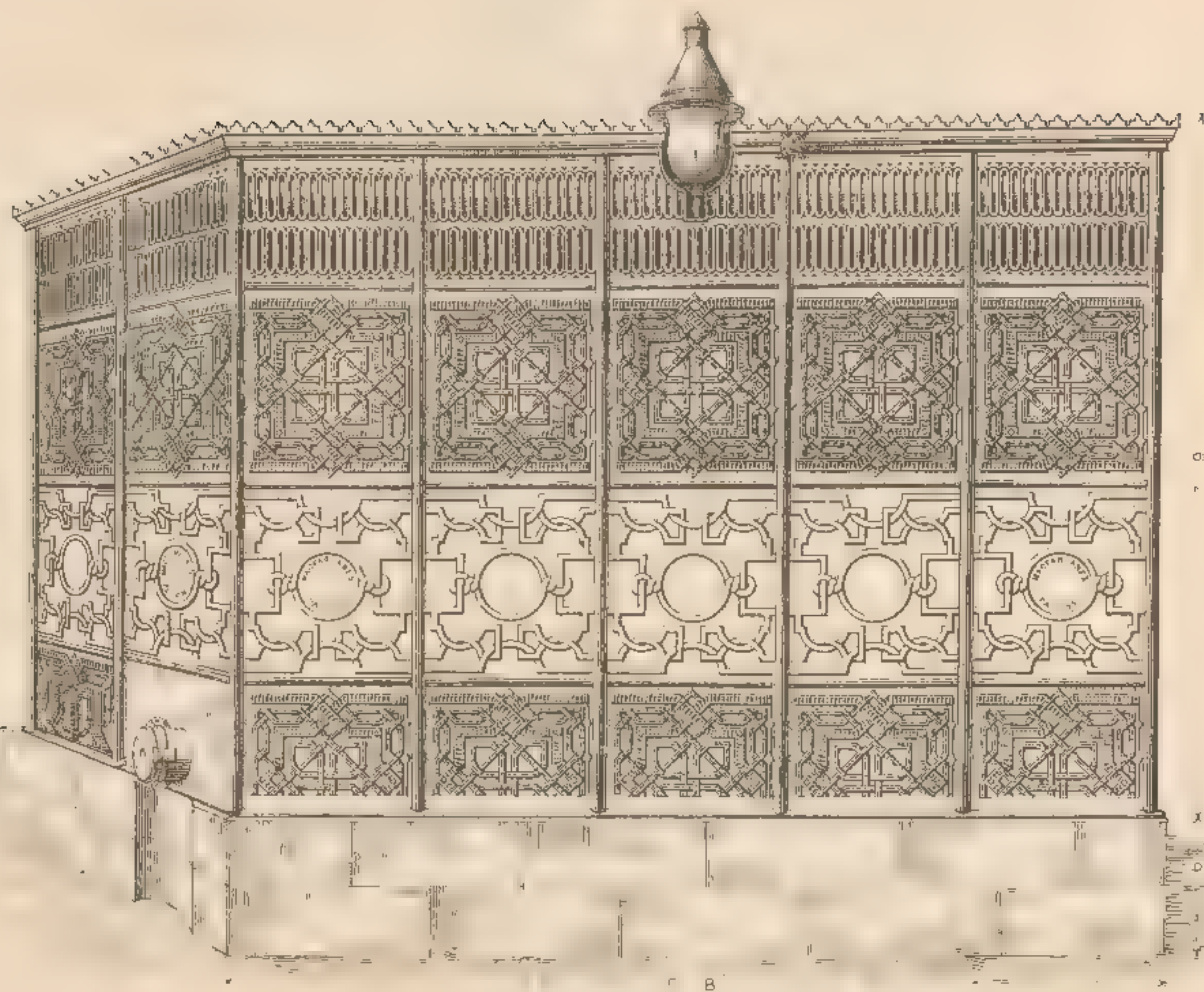
No. 18 ORDURE CLOSET is similar in its interior arrangements to No. 17, but instead of being fitted up against the wall of a building, the structure is complete in itself, and wholly composed of cast-iron.

No. 18 ORDURE CLOSET is also well suited for schools, &c., and for situations where it is desirable to be unconnected with the adjacent buildings.

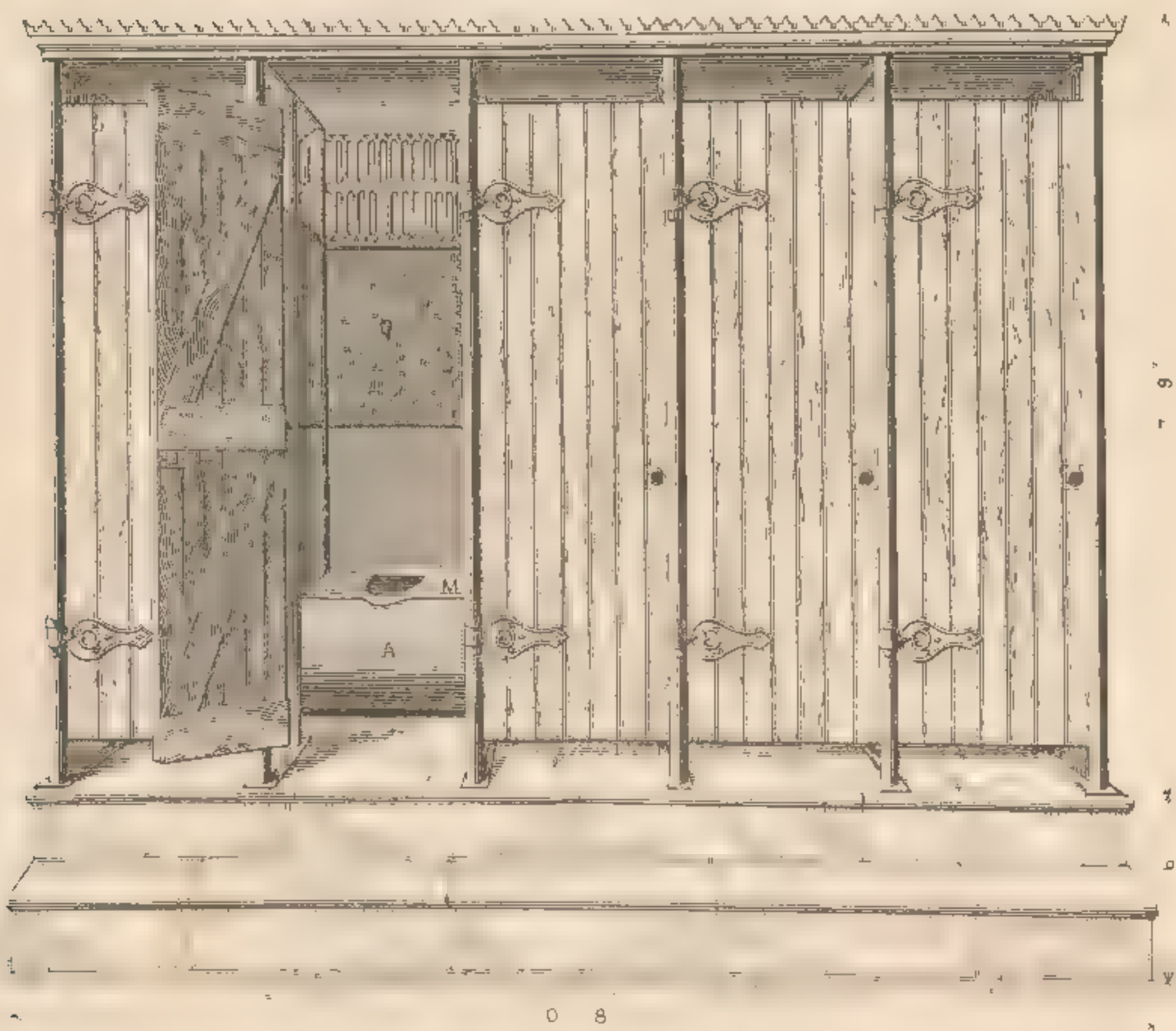
MACFARLANE'S PATENT

NO. 9 HAVIT

PAINT PATENT

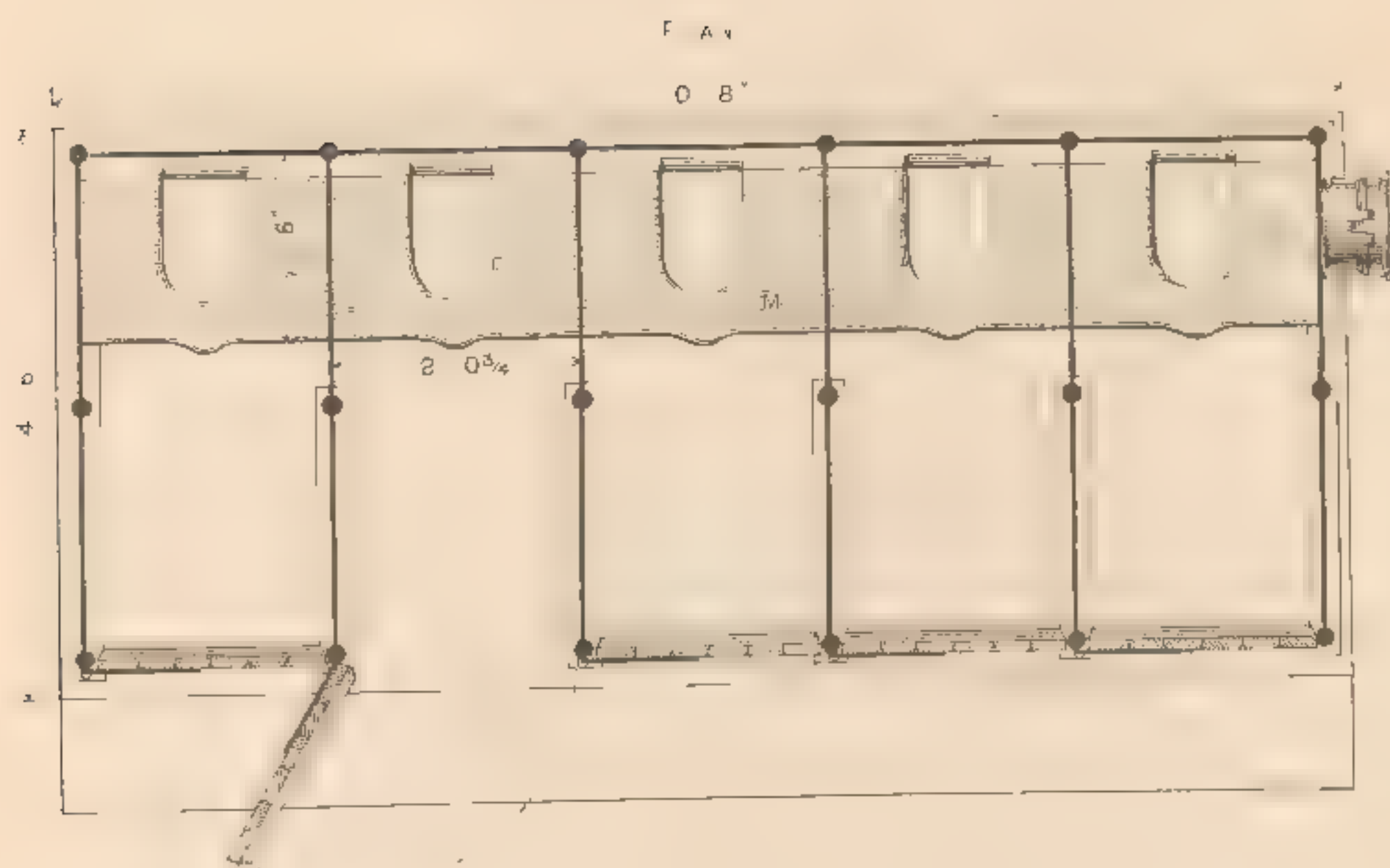
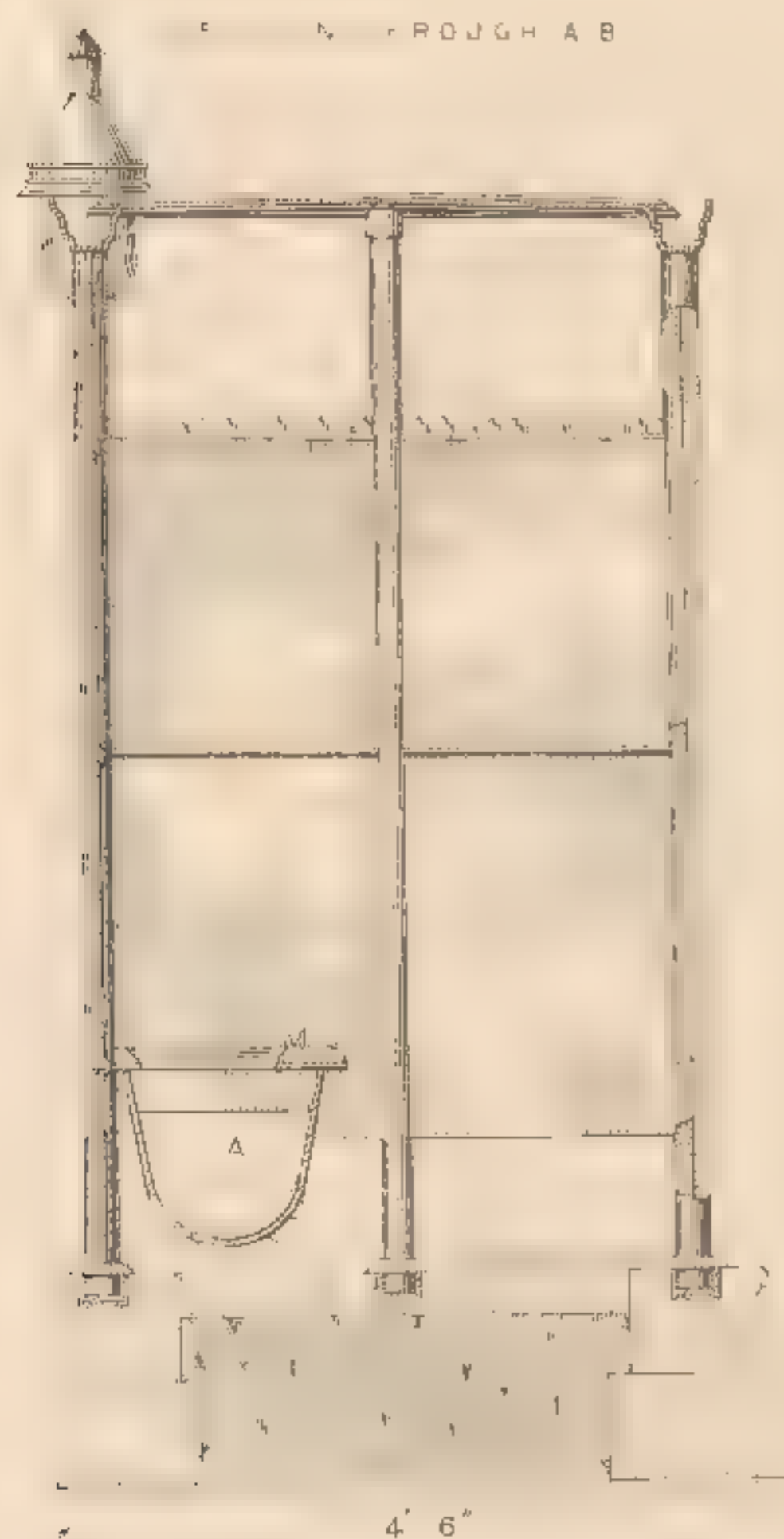


FRONT ELEVATION



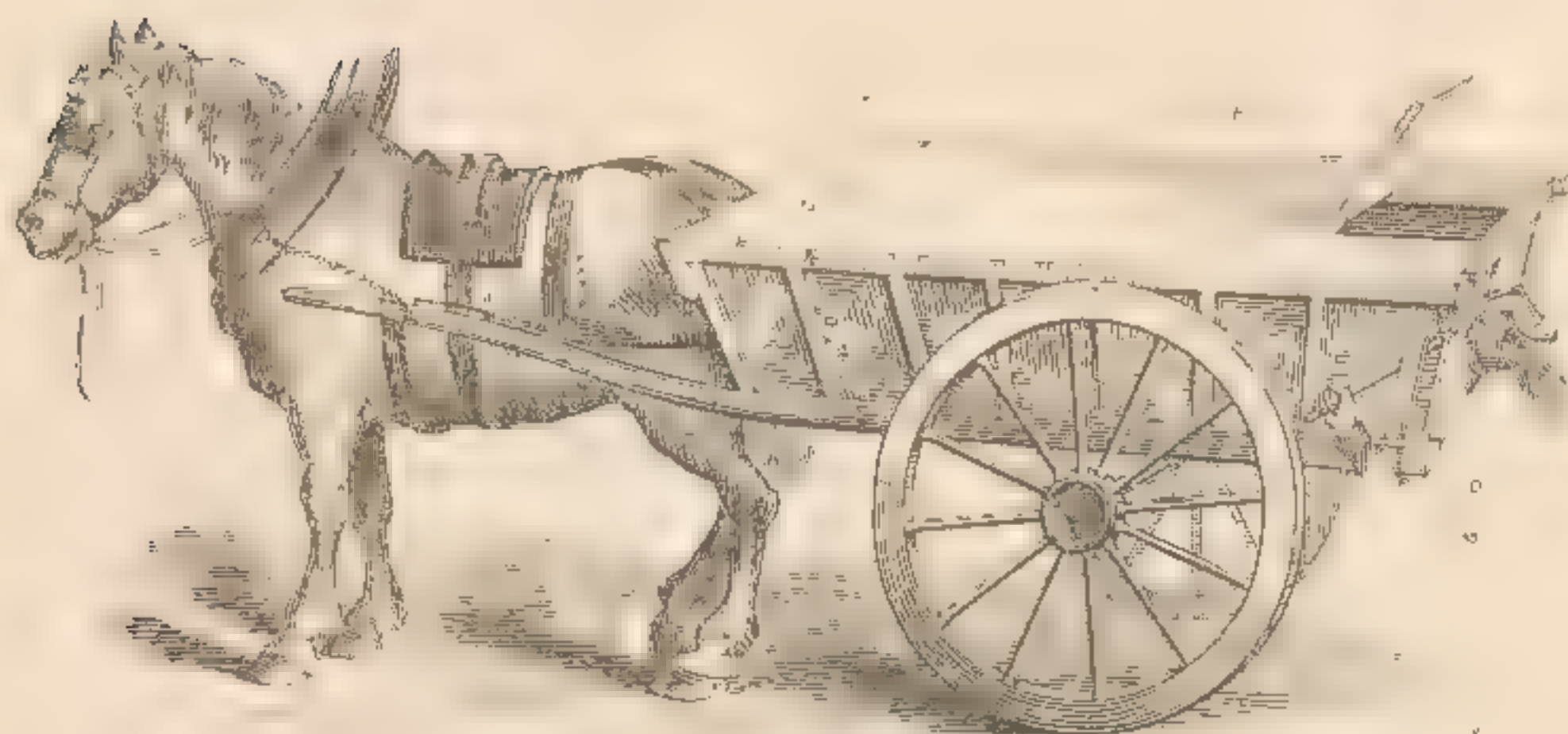
NO. 9

No 19 RANGE



No. 19 ORDURE CLOSET RANGE is similar in its arrangements to No. 18, but more room is allowed in front of the seats, and the height is 18 inches greater.

No. 19 ORDURE CLOSET RANGE will be found to be well adapted for situations where it is desirable to be unconnected with the adjacent buildings. The chaste and unobtrusive character of the structure adapts it for almost any situation, without detracting from the amenity of the surrounding objects.

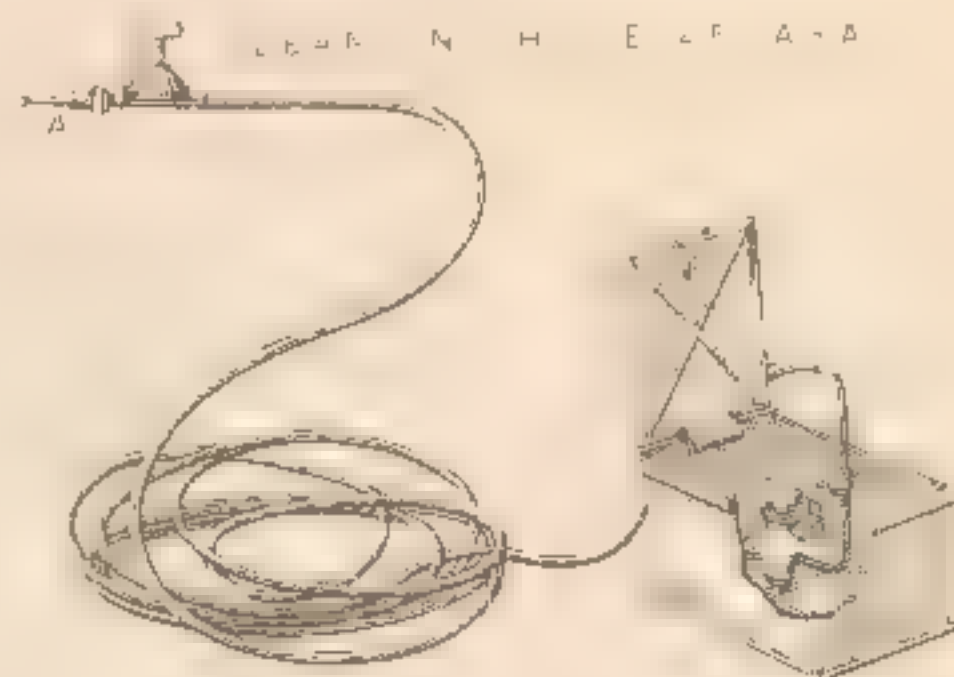
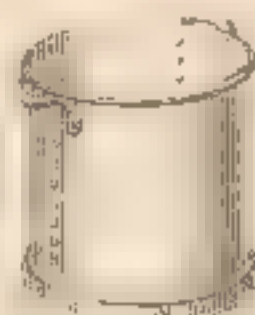


Our ORDURE CART is close bodied and water-tight. An opening is in the top for receiving the soil, and the discharge valve at the end is similar in its action to the valve of our Ordure Closet. The illustration represents the hand of the attendant in the act of opening the valve, and discharging the contents at the manure depot.

ORDURE SCRAPER



ORDURE BUCKET

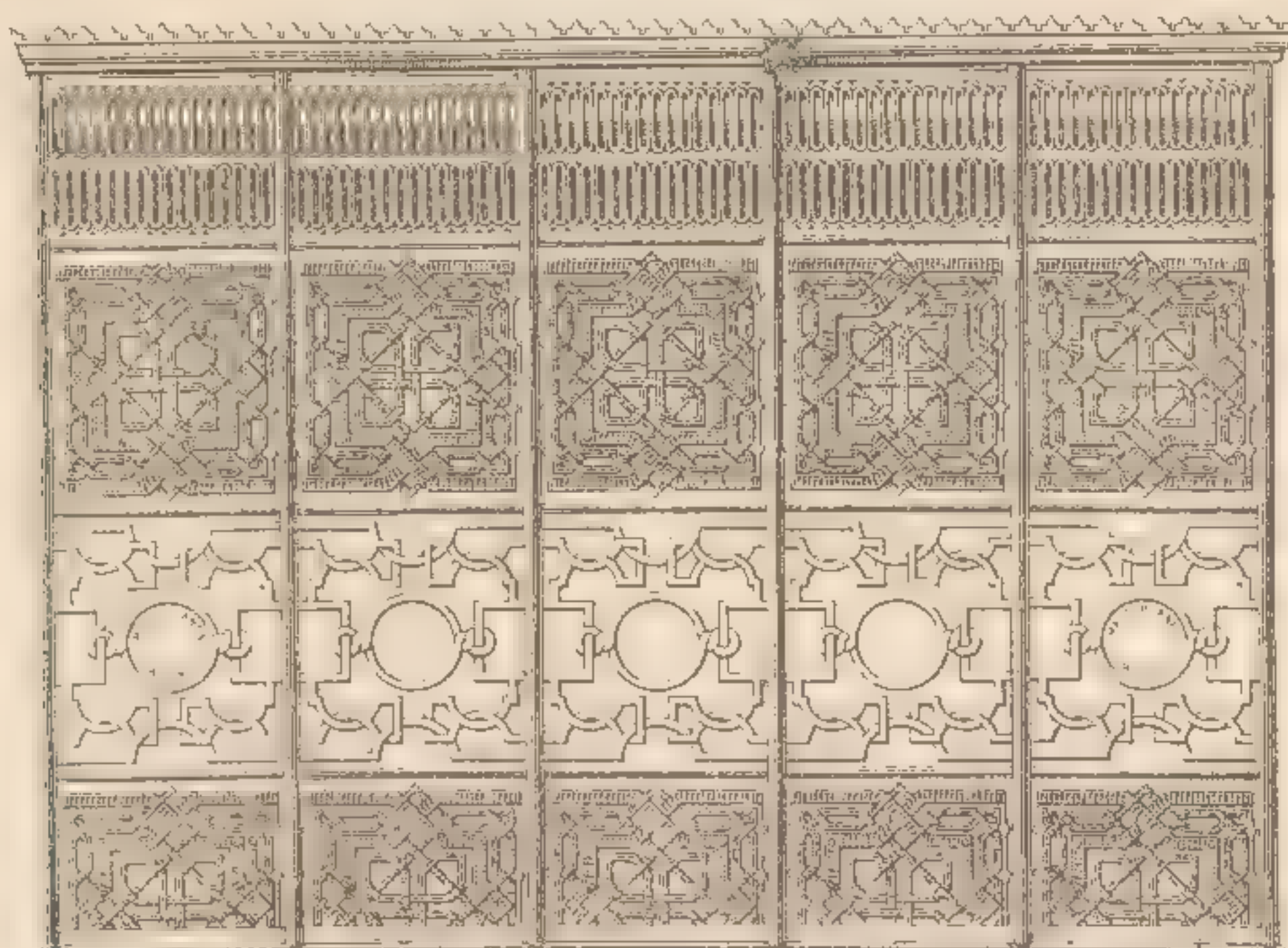


The ORDURE SCRAPER is used for facilitating the discharge of our Ordure Closets.

The ORDURE BUCKET is used for emptying our Ordure Closets, and discharging the contents into Ordure Cart.

The CLEANSING HOSE APPARATUS consists of a hose with water-jet A on the one end, and the other end fitted with union coupling for attaching to corresponding screw on the nose of the stop-cock B; the latter is placed underground to protect it from frost, and is inclosed by cast-iron casing, with a hinged cover c. This apparatus is for washing Public Conveniences, Urinals, Courts, &c. A great saving of water and time is thus effected, besides being much better done than by the old system of buckets.

ORNAMENTAL SCREEN OR WALL



Our ORNAMENTAL SCREEN or WALL may be fitted up in connection with any sanitary apphance, in front of the entrances, &c., and can be made any size to order.

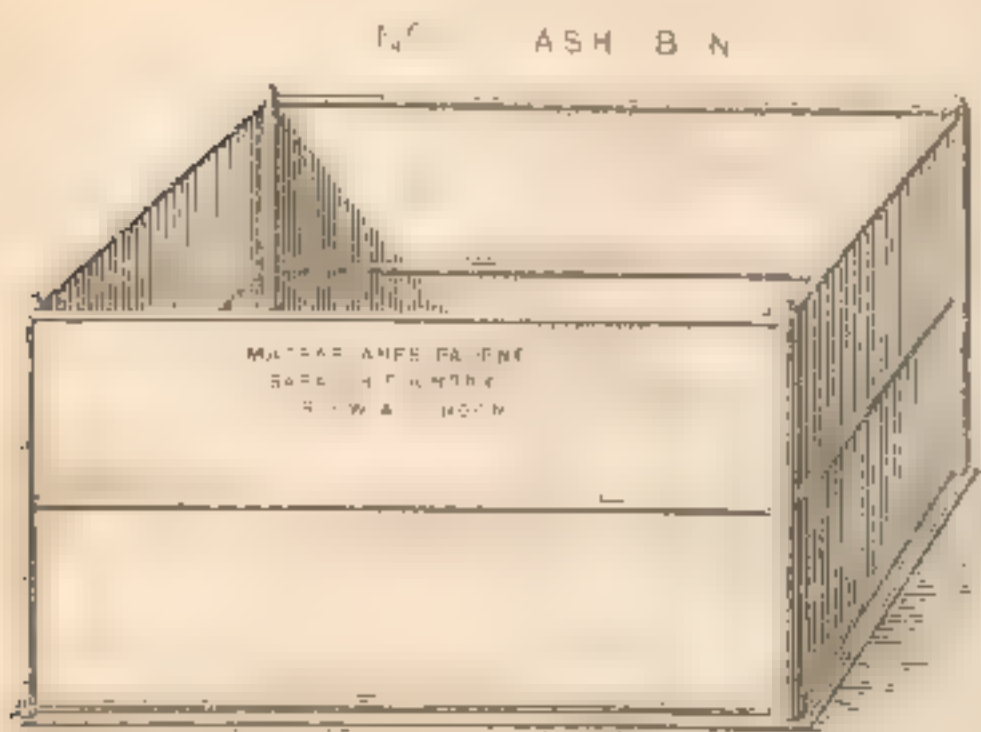
SECTION XVI.—ASH BINS.

591

MACFARLANE'S ASH BINS

Too little attention has hitherto been bestowed on this common and necessary appliance; generally huge unsightly erections have been built of stone or brick, occupying a space of ground altogether beyond what is necessary, and putrefying matter has thus been stored up for months in the midst of a dense population, to the great detriment of the health of the community. Local authorities are now becoming alive to this evil, and are insisting more imperatively upon the daily removal of all garbage from amongst the people. There are many different modes of collecting and removing the ashes, garbage, &c., of a community, and much depends on the construction of the buildings; the subject is one that has for several years received much of our attention, during which time we have introduced very extensively our cast-iron Ash Bins, having fitted up in Glasgow alone, under sanction of the local authorities, accommodation of this kind for many thousands of the population with the most marked success.

Cast-iron is obviously the best material for Ash Bins, on account of its non-absorbent nature, its strength, the obstruction it offers to vermin of every sort, and the little room it occupies. The Bin should be of easy access to the persons using it, and at the same time convenient for the dustman, the size being not greater than is necessary for the collection of a day's garbage.

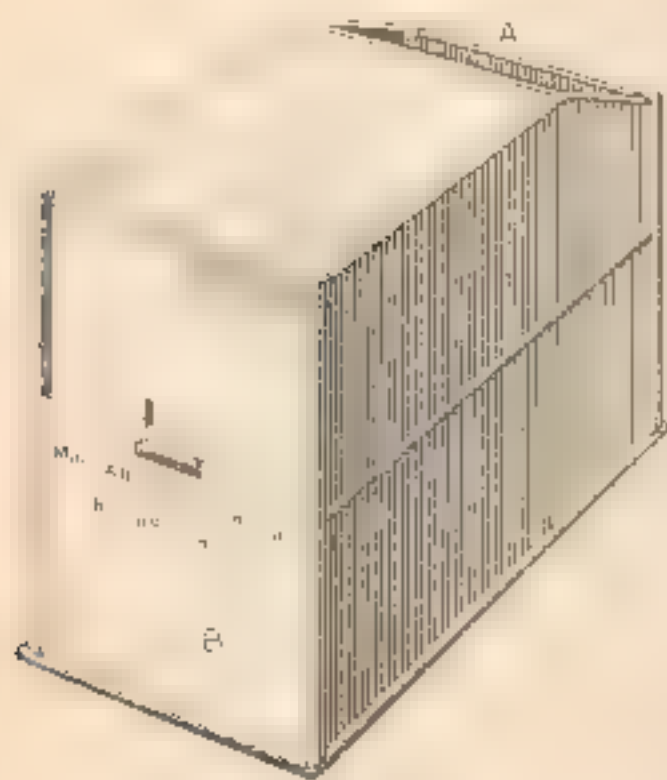


No. 1 ASH BIN is wholly composed of cast-iron and is water-tight. The sole plate should be 15 inches below the ground level, and requires no foundation.

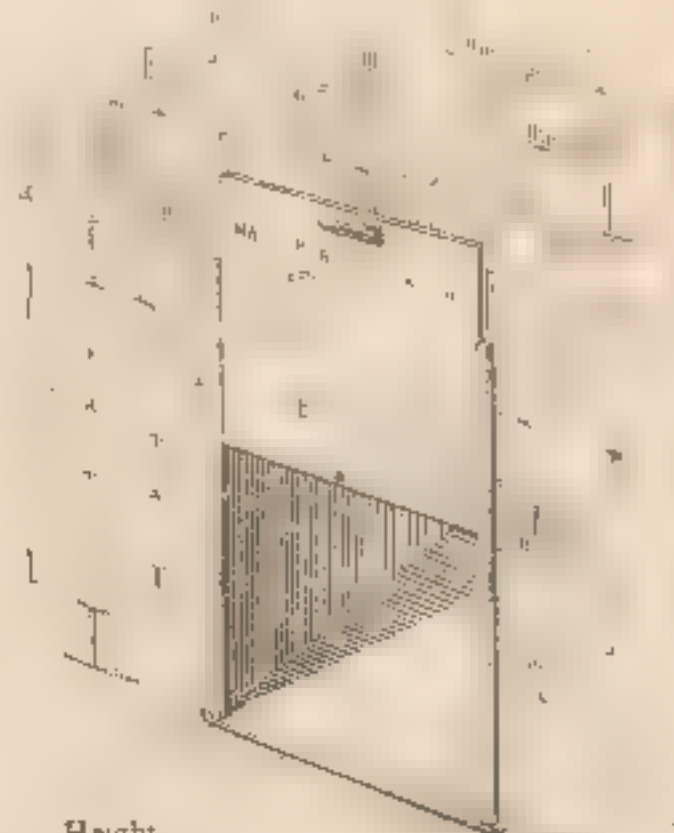
Length.	Breadth.	Height.
4 feet, 6 inches. x	1 foot, 9 inches. x	2 feet, 6 inches.
4 " 6 " x	2 " 0 " x	2 " 6 "
4 " 6 " x	2 " 6 " x	2 " 6 "
4 " 6 " x	3 " 0 " x	2 " 6 "

No. 2 ASH BIN

ELEVATION SHOWING ASH BIN BUILT INTO WALL



ELEVATION SHOWING ASH BIN BUILT INTO WALL

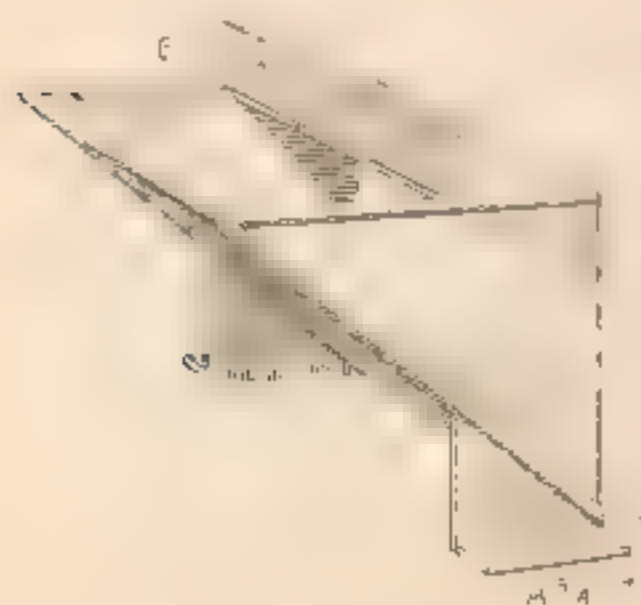


Length.	Breadth.	Height.
2 ft., 0 ins. x	1 ft., 9 ins. x	2 ft. 6 ins.
2 " 6 " x	1 " 9 " x	2 " 6 "
3 " 0 " x	1 " 9 " x	2 " 6 "

No. 3 ASH BIN consists of an oblong cast-iron case, having at the back an oblong opening A, 5 1/2 inches wide, and in front, a slide door B, opening upwards, attached to which is a lock. It is constructed for being built into the wall at the rear of the premises, the ashes, garbage, &c., being discharged into the Bin by the opening A, inside the premises; whilst the dustman, by opening the slide door B, has access to the interior of the Bin for emptying it from the outside without coming into the premises.

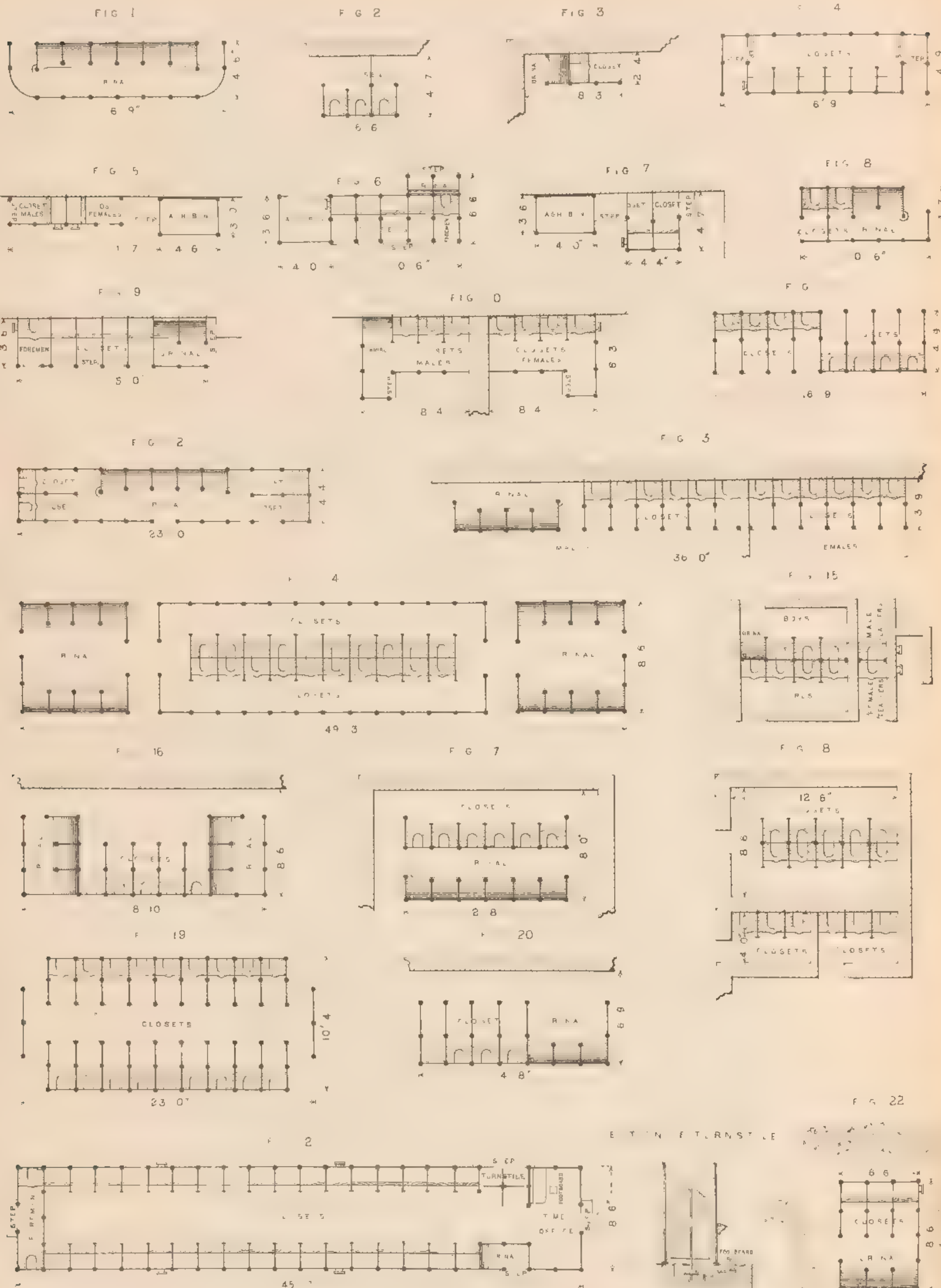
No. 3 ASH BIN HOPPER

No. 4 ASH BIN DOOR



The ASH BIN HOPPER and ASH BIN DOOR are suitable for discharging into an Ash Bin that may be placed on the opposite side of the wall. Various modifications of these can be made to suit peculiar situations.

MACFARLANE'S PATENT URINALS WATER CLOSETS ORDURE CLOSETS & ASH BINS

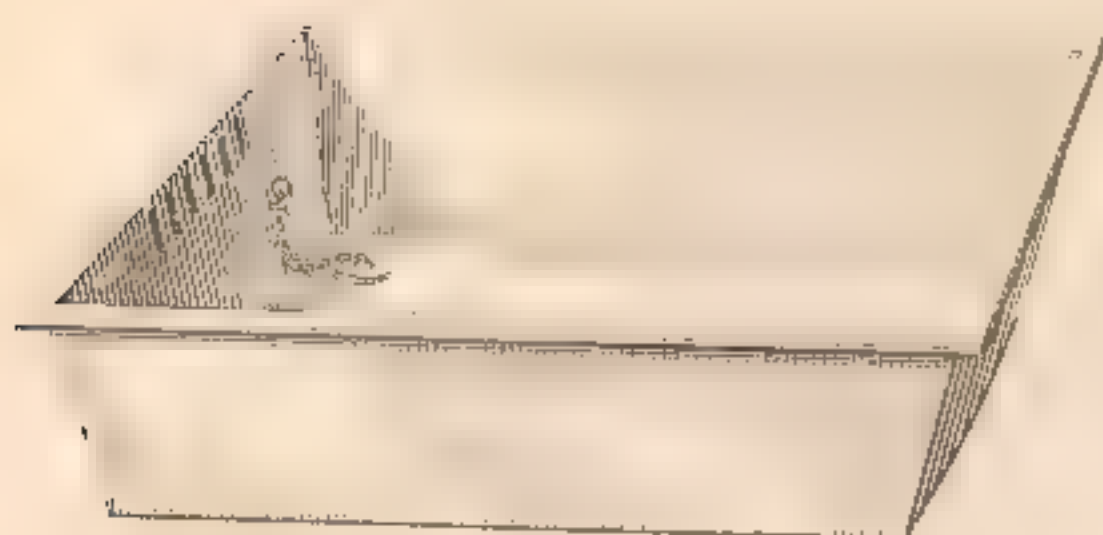


MACFARLANE'S EXAMPLES.—Arrangements of Urinals, Water Closets, Ordure Closets, and Ash Bins.

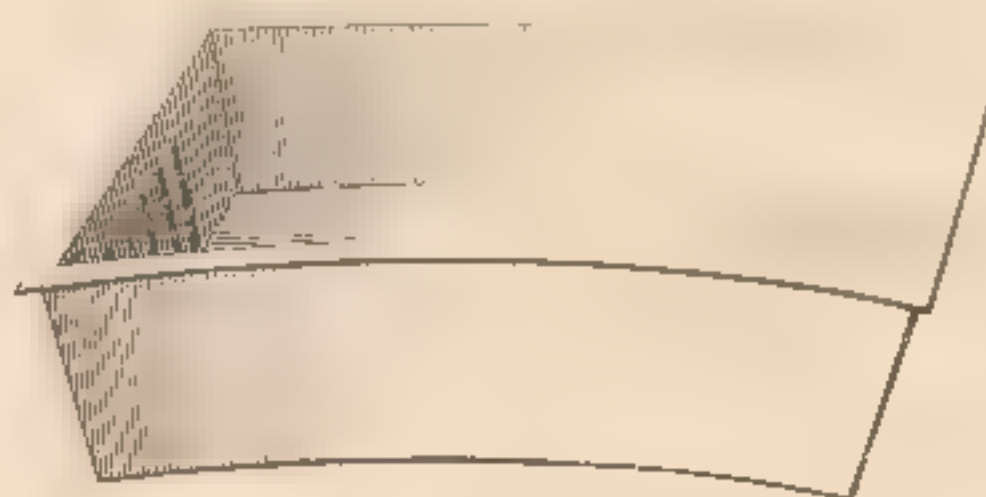
SECTION XVII. PLUMBERS' CASTINGS.

MACFARLANE'S PLUMBERS' CASTINGS.

Nº 1 KITCHEN SINK

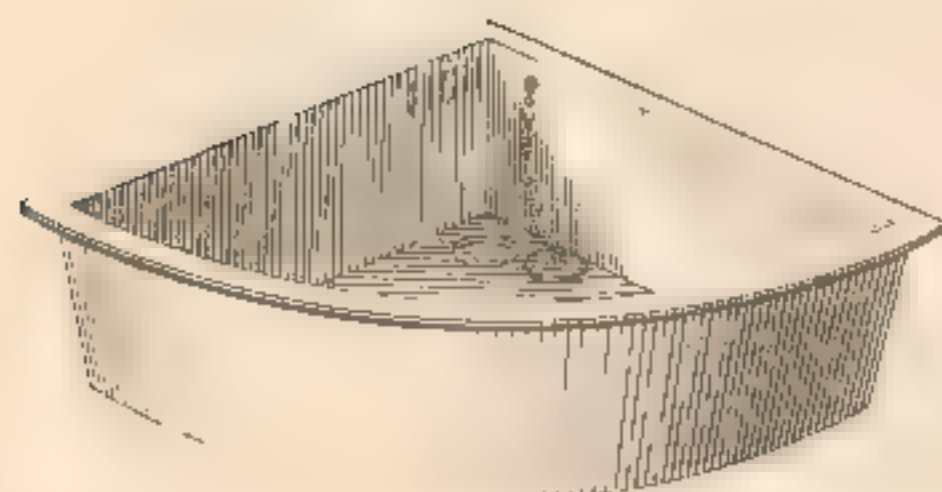


Nº 2 SINK FOR CIRCULAR STAIRCASES



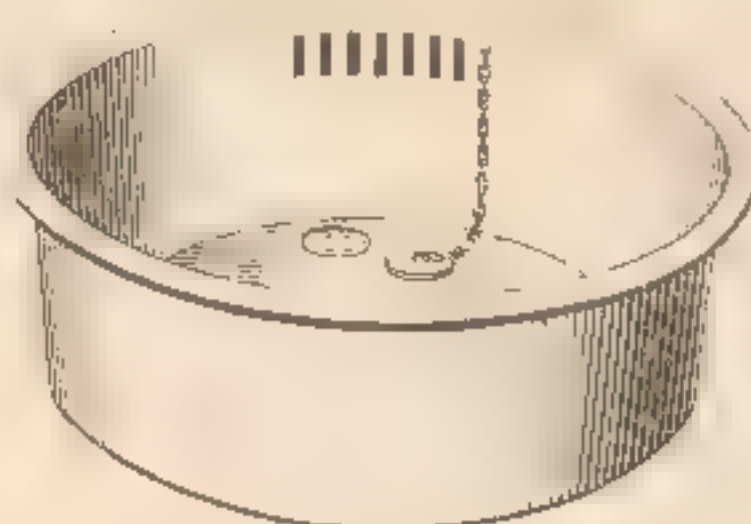
27 X 16 X 9 IN

Nº 3



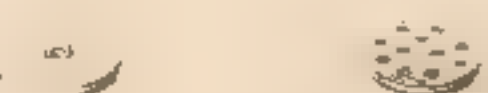
4 INS BROAD ON EACH SIDE BY 6 IN DEEP
8
22

Nº 4 OVAL SINK



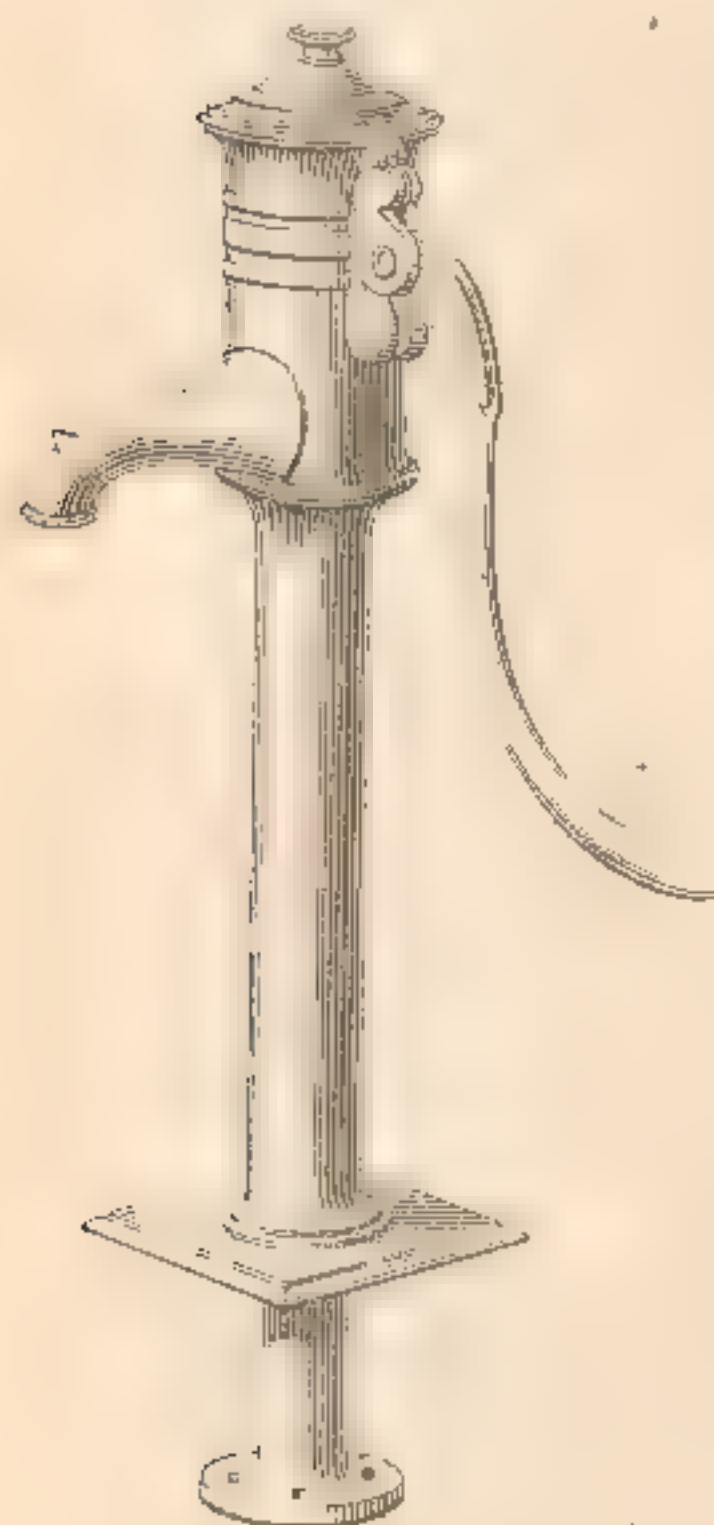
21 X 18 X 10 IN

FLG DRAINER

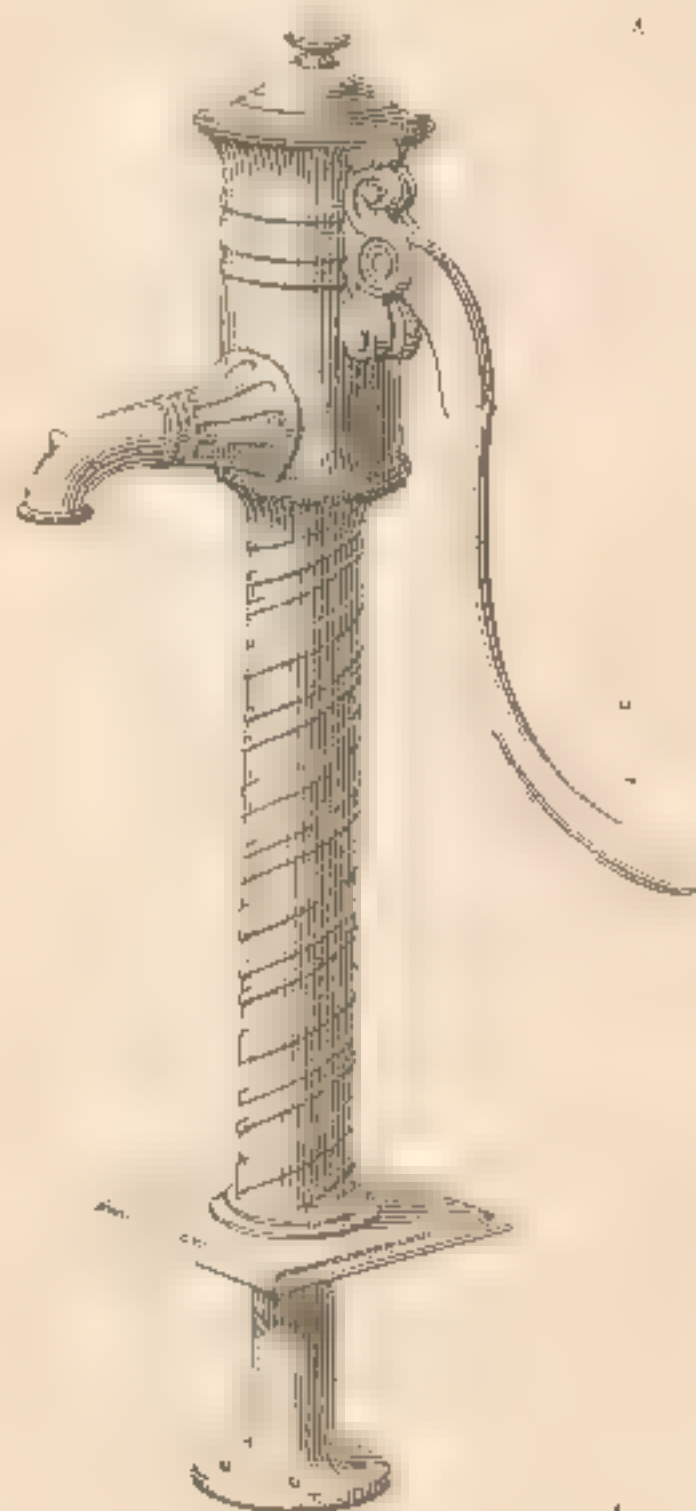


1 3/4, 2, 2 1/4, 2 1/2, 2 3/4,
& 3 INS DIAMETER

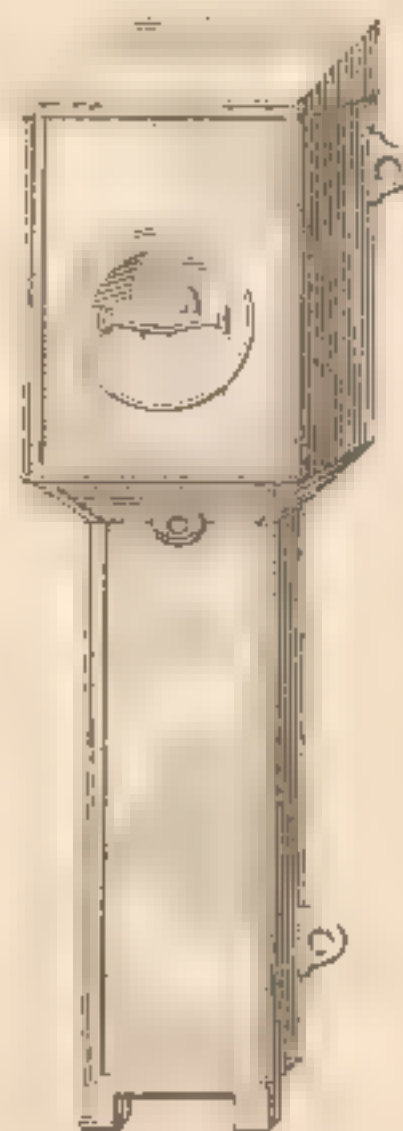
Nº 1 PUMP



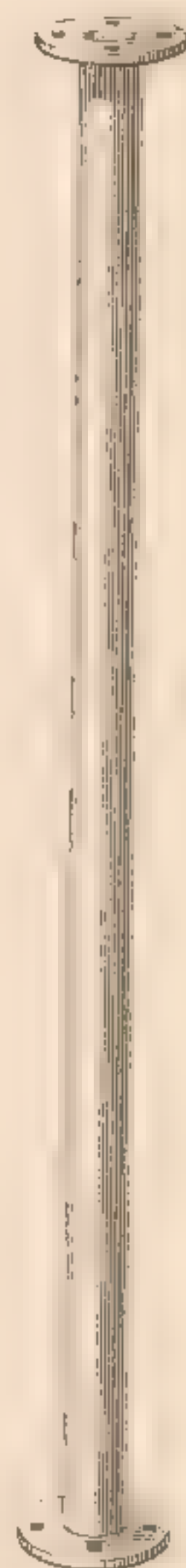
Nº 2 PUMP



WELL PUMP

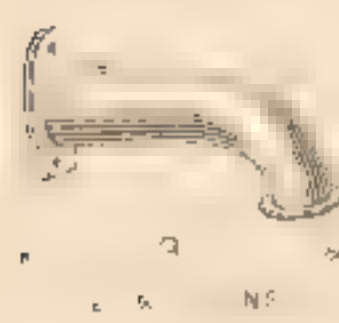


F.M.P.



2 X 2 X 15

F.M.P.

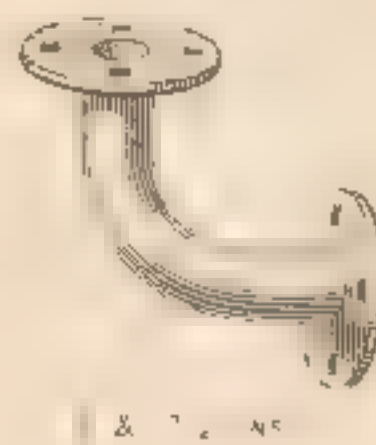


P.M.P.



1 X 15

F.M.P.

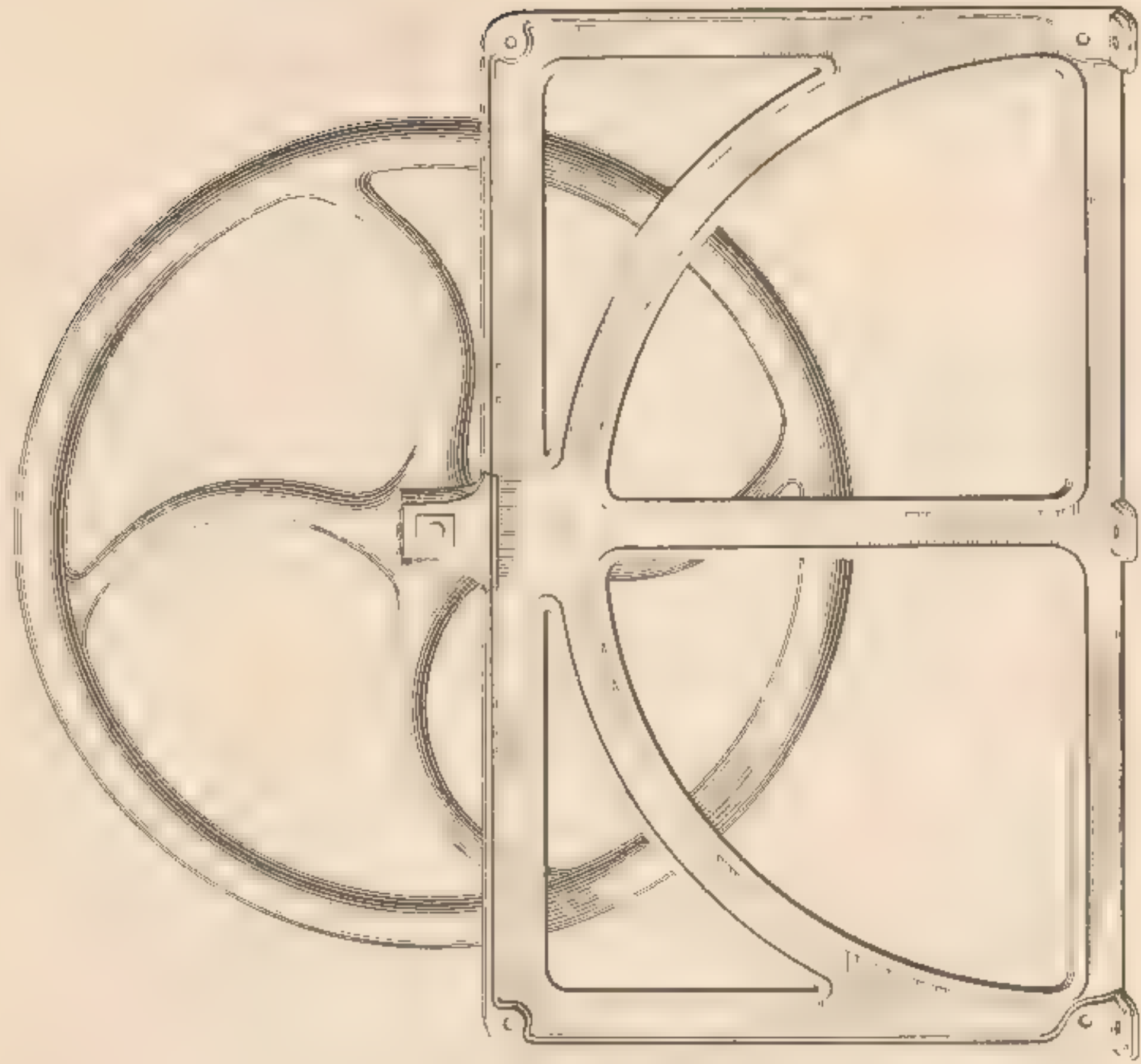


1 X 15

SCALE 1 INCH = 1 FOOT

MANUFACTURERS' CASTINGS

ENGINE PUMP FRAME & FLY WHEEL



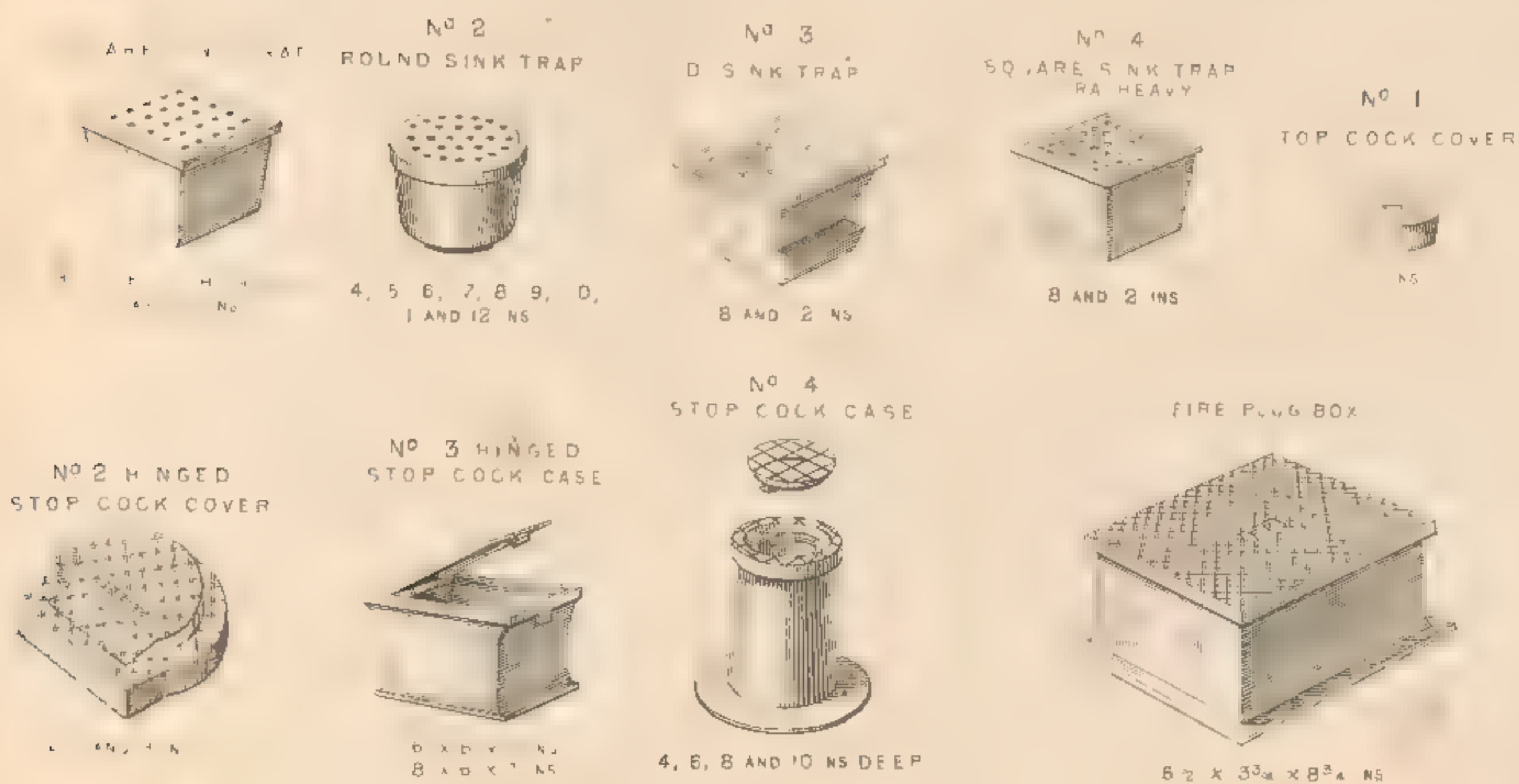
FRAME 5 FT X 3 FT N
FLY WHEEL 4 FT DIAMETER

FLY WHEEL

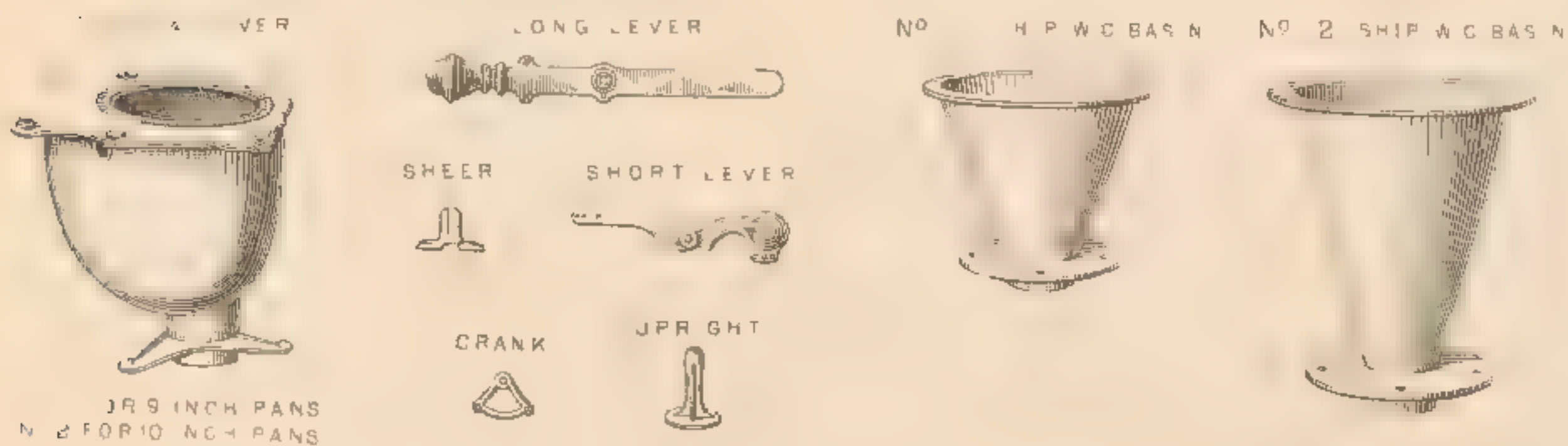


FLY WHEEL 4 FT DIAMETER
FRAME 5 FT X 3 FT N

MACFARLANE'S PLUMBERS' CASTINGS



PAN W.C. FITTINGS



PLUMBERS' TOOLS



800-

RA RO



MACFARLANE'S
CASTINGS